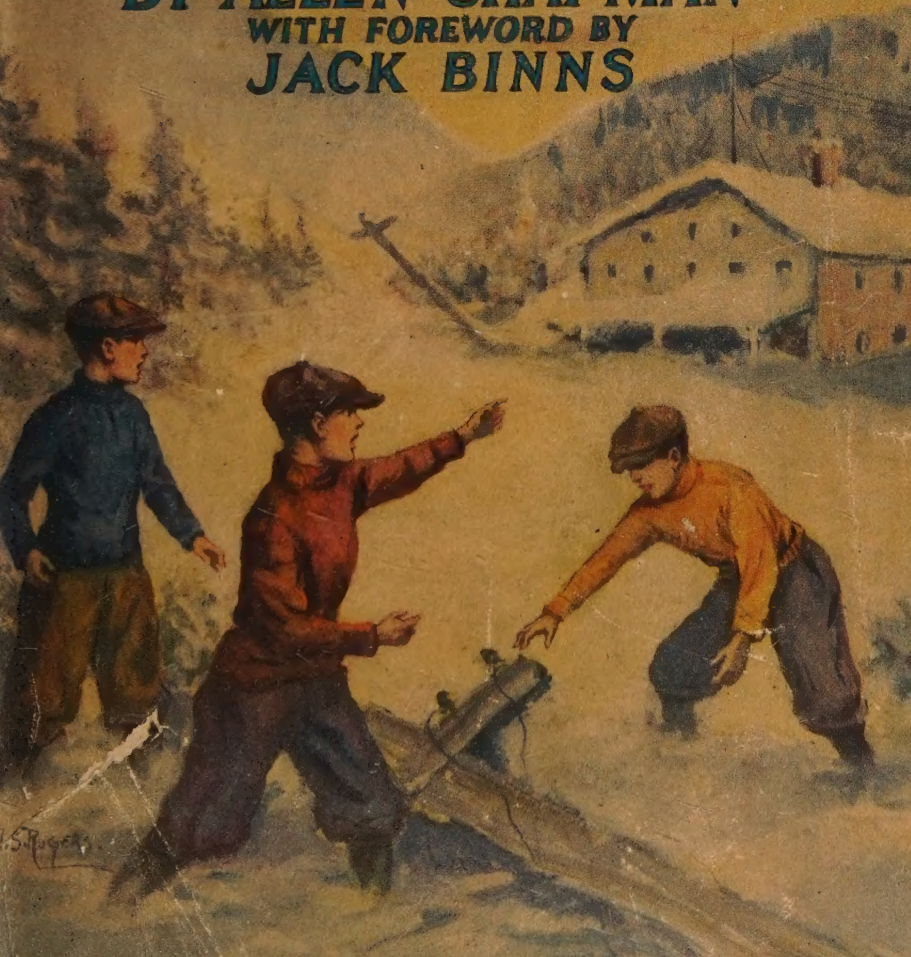


The RADIO BOYS AT MOUNTAIN PASS

BY ALLEN CHAPMAN
WITH FOREWORD BY
JACK BINNS



THE RADIO BOYS SERIES

(TRADEMARK REGISTERED)

THE RADIO BOYS SERIES

(Trademark Registered)

THE RADIO BOYS AT MOUNTAIN PASS;

Or, The Mountain Call For
Assistance

By ALLEN CHAPMAN

Author of

"The Railroad Series," Etc.,

With a

FOREWORD BY JACK BINNS

This story opens in the woods where the Radio Boys find themselves confronted most unexpectedly by a big bear. Then, after some interesting experiments with radio, the scene is shifted to Mountain Pass, where the lads, after a thrilling ride through a blinding snow-storm, put up at a big hotel filled with winter guests. Here they presently learn that a Wall Street broker is in danger of being defrauded through a stock transaction and that the man's wife is sick and must have expert medical attention. All telephone and telegraph wires are down, and how the Radio Boys came to the front and got a doctor by wireless, and sent messages through to the Stock Exchange makes reading no one would care to miss.

13. -
I
James Spefferman



THE RADIO BOYS AT
MOUNTAIN PASS



"LOOK! OUR AERIAL IS STILL UP"

The Radio Boys at Mountain Pass.

Page 173

THE RADIO BOYS SERIES

(Trademark Registered)

THE RADIO BOYS AT MOUNTAIN PASS

OR

THE MIDNIGHT CALL FOR ASSISTANCE

BY

ALLEN CHAPMAN

AUTHOR OF

THE RADIO BOYS' FIRST WIRELESS

THE RADIO BOYS AT OCEAN POINT

RALPH OF THE ROUNDHOUSE

RALPH THE TRAIN DESPATCHER, ETC.

WITH FOREWORD BY

JACK BINNS

ILLUSTRATED

NEW YORK
GROSSET & DUNLAP
PUBLISHERS

Made in the United States of America

BOOKS FOR BOYS
BY ALLEN CHAPMAN

12mo. Cloth. Illustrated.

THE RADIO BOYS SERIES

(Trademark Registered)

- THE RADIO BOYS' FIRST WIRELESS
Or Winning the Ferberton Prize
THE RADIO BOYS AT OCEAN POINT
Or The Message that Saved the Ship
THE RADIO BOYS AT THE SENDING STATION
Or Making Good in the Wireless Room
THE RADIO BOYS AT MOUNTAIN PASS
Or The Midnight Call for Assistance
THE RADIO BOYS TRAILING A VOICE
Or Solving a Wireless Mystery
-

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Or The Trials and Triumphs of a Young Engineer
RALPH THE TRAIN DESPATCHER
Or The Mystery of the Pay Car
RALPH ON THE ARMY TRAIN
Or The Young Railroader's Most Daring Exploit
-

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The Radio Boys at Mountain Pass

FOREWORD

BY JACK BINNS

In the first chapter of this volume there appears a statement by "Bob," one of the Radio Boys, as follows: "Marconi is one of those fellows that can never rest satisfied with what's been done up to date."

Perhaps no more concise summary of the driving force back of the men responsible for the tremendous development of radio could be made. It is just that refusal to be satisfied with what has been accomplished that has made wireless the greatest wonder development in the history of mankind.

Although the radio boys in this case are but creatures of the author's imagination, nevertheless they are typical of all the men who have taken part in bringing radio to its present stage. Even Marconi himself likes to take pride in the assertion that he too was at one time an amateur, because he insists that during his early experiments he was only a boy amateur tinkering with a little known subject.

There is undoubtedly a great deal of truth in

FOREWORD

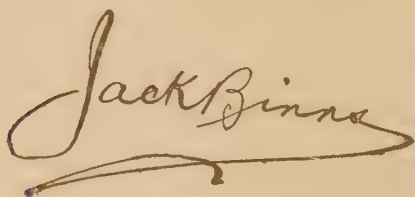
his claim, because the experiments that led to his success were made while he was a youth studying at the Bologna University in Italy.

What is true of Marconi is equally true of all the others. We have only to think of a name prominent in the field of wireless, and then trace back the history of the man who bears it, and you will come to an enthusiastic amateur.

There is another fascinating thing about wireless, and it is the fact that no matter how much work one may really expend in tinkering with it, and no matter how valuable the results, it does not seem like real work. This is aptly phrased by Joe in the book who says:

"I'd like to take it up as a regular profession. Think of what it must be for fellows like Armstrong and Edison, and De Forest and Marconi. I'll bet they don't think it's work."

There is no doubt that Joe wins his bet.

A handwritten signature in dark ink, reading "Jack Binns". The signature is written in a cursive style with a large, sweeping initial "J" and a long, horizontal flourish extending to the right.

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THE RADIO BOYS AT MOUNTAIN PASS

CHAPTER I

THE BEAR PURSUES

"NOTHING to do till to-morrow!" sang out Bob Layton, as he came out of high school at Clintonia on Friday afternoon, his books slung over his shoulder, and bounded down the steps three at a time.

"And not much to do then, except just what we want to," chimed in Joe Atwood, throwing his cap into the air and catching it deftly as it came down.

"You fellows do just love to work, don't you?" put in Herb Fennington, with an air of self-righteousness that was belied by the merry twinkle in his eyes.

"Oh, we just dote on it," replied Bob.

"Work is our middle name," asserted Joe. "In fact we lie awake nights trying to conjure up something to do."

"Regular pair of Work Hard twins—I don't

think," declared Jimmy Plummer. "Now as for me——"

"Yes?" said Herb, with an assumption of polite interest.

"As for me," repeated Jimmy, not at all daunted by the incredulity in Herb's tone, "I've been working like a horse all this season. A little more and I'll be only skin and bone."

As Jimmy was by all odds the fattest boy in school, this assertion was greeted by a roar of laughter.

"Now I know why you look like a string bean," chuckled Joe.

"That explains why his clothes hang on him so loosely," laughed Bob, pointing to Jimmy's trousers which were so filled out that they resembled tights. "Jimmy, you may be an unconscious humorist, but you're a humorist just the same."

Jimmy glared at his tormentors and tried to look wan and haggard, but the attempt was not a pronounced success.

"All the same," he protested, "Doc. Preston has been rushing us like the old Harry all this fall, and what with school work and home work and radio work——"

"Radio!" interrupted Bob. "You don't call that work, do you? Why it's fun, the greatest fun in the world."

"You bet it is," chimed in Joe enthusiastically. "We never knew what real fun was until we took it up. Look at the adventures it's brought us. If it hadn't been for radio, we wouldn't have won those Ferberton prizes; we wouldn't have run down Dan Cassey and made him give back the mortgage he was trying to cheat Miss Berwick out of; and we wouldn't have got back the money he nearly got away with when he knocked out Brandon Harvey."

"Right you are," agreed Bob. "And probably that boat our folks were on would have gone down with all on board if it hadn't been for the radio message that brought help to it. And see the good it did for Larry and the experience we had in sending out from the broadcasting station in Newark!"

"I tell you, fellows, there's nothing like radio in the universe!" agreed Jimmy.

"I'd like to take it up as a regular profession," said Joe. "Think of what it must be for fellows like Armstrong and Edison and De Forest and Marconi. I'll bet they don't think it's work. They're eager to get at it in the morning and sorry to knock off at night. There's no drudgery in a profession like that."

"Speaking of Marconi," remarked Herb, "I see that he's just come over to America again on that yacht of his where he thought he heard sig-

nals that might have been from Mars. I wonder if he's heard any more of them."

"I don't know," replied Bob thoughtfully. "Though I've become so used to what seem to be almost miracles that I'm prepared for almost anything. At any rate, the only thing one can do nowadays is to keep an open mind and not say beforehand that anything is impossible. It would be great, wouldn't it, if we could get in touch with another planet? And if we could with one, there doesn't seem to be any reason why we couldn't with all, that is if there's life and intelligence on them. But after all, at present that's only speculation. What interests me more just now is the discovery that Marconi is said to have made by which he is able to send out radio waves in one given direction."

"I hadn't heard of that," remarked Joe. "I thought they spread out equally in all directions and that anybody who had a receiving set could take them."

"So they have up to now," replied Bob. "But Marconi's one of those fellows that can never rest satisfied with what's been done up to date. That's what makes him great. I'm not exactly clear about this new idea of his, but the gist of it is that he throws a radio wave in a certain direction, much as a mirror throws a ray of light. He uses a reflector apparatus and the wave is caught

at the receiving end on a horizontal metal standard. With a wave of only three and one half meters he has thrown a shaft nearly a hundred miles in just the direction he wanted it to go. The article I read said that he had some sort of semicircular reflector covered with wires that resembled a dish cut in half. When the open side is turned toward the receiving station he wants to reach, the signals are heard loud and clear. When the open part is turned away, the signals can't be heard. The whole idea is concentration. Just what a burning glass does with the rays of the sun, his device does with the radio waves. Marconi's a wizard, and that's all there is about it. There's no knowing what he may do next. But you can be sure that it'll be something new and valuable."

"He's a wonder," agreed Joe heartily. "And if he's the 'father of wireless,' we've got to admit that he has a good healthy baby. I'm going to try to get on friendly terms with that baby."

"We've already been introduced to it, if we haven't got much further," laughed Bob. "But say, fellows, what's the program for to-morrow?"

"Three square meals," was Jimmy's suggestion.

"Sure," agreed Herb. "Though in your run-down condition you ought to have at least six."

"He'll get them, don't worry," chaffed Joe, unmoved by the reproach in Jimmy's eyes.

"I was thinking——" Bob began.

"How do you get that way?" inquired Herb composedly.

"You'll never get that way," retorted Bob severely. "As I was saying when this lowbrow interrupted me, I was thinking that it might be a good idea to go nutting. The trees are full of nuts this year, and that frost we had a couple of nights ago will make it easy to get a raft of them. What do you say?"

"I say yes with a capital Y," replied Joe.

"Hits me just right," assented Herb.

"It's the cat's high hat," was the inelegant way that Jimmy phrased it.

"It's a go then," said Bob. "Come around to my house a little after eight to-morrow morning and we'll get an early start. Every fellow brings his own lunch, and we'll take some potatoes along to roast in the woods."

"Here's hoping it will be a dandy day," said Herb, as the boys parted at Bob's gate.

"It looks as though it were going to be," replied Bob, looking at the sky. "But after supper I'll tune in and get the weather report by radio."

"Anything you don't do by radio?" asked Joe, with a grin.

"Oh, I set my watch by the Arlington signal every night and a few other things," laughed

Bob. "Fact is, I'm hanging around the receiving set every spare minute I have for fear I'll let something get by me. Radio has got me, and got me for fair."

The weather report was favorable and Bob slept in peace. And when he opened his eyes on the following morning he found that Uncle Sam's weather bureau had been right in this particular instance, for a lovelier fall morning, to his way of thinking, had never dawned.

He ate breakfast a little more quickly than usual, and had barely finished when the other radio boys were at his door loaded with lunches and ready to start. Jimmy especially was well furnished in the matter of provisions, for he carried two packages while the rest of the boys were content with one.

"Aren't you afraid you'll be hunchbacked carrying both those bales of goods?" asked Herb, with mock anxiety.

"Not a bit," responded Jimmy cheerfully. "One of them is full of doughnuts, and I expect to eat them on the way. You see I was in such a hurry that I didn't eat much of a breakfast——"

"What?" exclaimed Bob.

"Can I believe my ears?" asked Herb plaintively.

"Say it again and say it slow," urged Joe.

"I mean," Jimmy hurried to correct himself,

"not so much as I might have eaten. I had a bit of cereal——"

"Catch on to that 'bit,' " murmured Herb.

"And some bacon and eggs and a slice of cold meat from the roast last night and some hot rolls and——"

"Outside of that you didn't have anything to eat," said Joe. "All right, Jimmy, old boy, we understand. But shake a leg now and let's get under way. This is too fine a day to be spending it in a chinfest, and besides we can have plenty of that as we go along."

The air was brisk and stimulating, with just enough warmth imparted by the sun to prevent its being cold, and a soft autumnal haze hung over the landscape and clothed it in mellow beauty. It was the kind of day when Nature is at her best and when it is good just to be alive.

The boys were like so many young colts turned out to pasture, and joked and jested as they went along. Laughter came easily to their lips and shone through their eyes, while the joy of youth ran through their veins and made them tingle to their finger-tips. Life was roseate and they had not a care in the world.

A walk of between two and three miles brought them to the woods for which they had set out. The forest covered a great many acres and was

full of noble trees, chestnut, hickory, and many other varieties.

As Bob had said, the year had been an unusually good one for nuts, and the trees were loaded with them. The frost of a little time before had been just sufficient to make them ready to pick, and the ground was already strewn with the half-opened burrs of many that had been shaken from the trees. Others still hung to the boughs by so slender and brittle a thread that it was only necessary to hurl clubs up into the trees to have them come down in showers.

The boys had brought big bags along with them to carry the nuts they might gather, and before long these had most of the wrinkles spread out of them by the steadily accumulating collection of chestnuts that formed the bulk of their treasure, although they had a good many hickory nuts as well.

The active work gave them all an appetite, a thing that came to them very easily under almost any circumstances, and a little before noon they ceased for a while from gathering the nuts and bestirred themselves in gathering leaves and brushwood for a fire. Their bags were more than half full, and from what they had seen they knew they would have little trouble in finishing filling them up to the very drawing strings.

They gathered together a little cairn of rocks and built the fire inside of it, keeping it fed to such effect that before long the stones were at a white heat. Then they drew the fire away and on the heated stones roasted their potatoes and a large number of the chestnuts they had gathered. They had brought plenty of salt and butter along, and when at last the potatoes were done they seasoned them and ate them with a relish exceeding anything that would have attended the eating of them at a regular meal in their homes. An epicure might have complained of the smoky flavor, but to the boys, seated on the leaf-carpeted ground flecked with the sunlight that sifted through the trees, the food was simply ambrosial.

With the potatoes they dispatched the rest of the food they had brought along. Then, with a feeling of absolute content, they stretched out luxuriously on the ground and munched the roasted chestnuts in beatific indolence.

For an hour or two they rested there, and then Bob rose and stretched himself and called his reluctant friends to action.

"It would be a sin and a shame to go out of these woods without having our bags crammed to bursting," he said. "Let's get a hustle on, and just for variety let's try another part of the woods."

"All right," assented Joe, while Herb and

Jimmy, though more slowly, roused themselves.

They picked up their bags and moved from place to place, choosing those sections where the trees grew thickest and the outlook for nuts was most promising.

"Better be a little careful," warned Joe, after they had gone a considerable distance. "Part of this wood belongs to Buck Looker's father, and perhaps he'd have some objection to our nutting here."

"I don't think any one would kick," responded Bob. "Everybody around here regards the woods as common property, as far as nutting is concerned. Besides, there's no way of telling, as far as I know, what section belongs to him and what to other people."

"There's something that will give us the tip," remarked Herb, pointing through the trees to a clearing in which they saw a two-story cottage. "That house belongs to Mr. Looker, though nobody has lived in it for a long while and I guess he's just letting it go to rack and ruin."

The house did indeed look shaky and dilapidated. Some of the railing and boards of the low veranda had been broken in or rotted away, and the whole place bore the look of decay that comes to houses that for a long time have been destitute of occupants.

"Looks as if it would fall to pieces if you breathed on it," said Herb.

"Old enough to have false teeth," commented Jimmy. "I suppose Mr. Looker lets it stand simply because it's cheaper than pulling it down."

The boys gathered nuts for perhaps two hours longer, and then they had to stop because their bags would not hold any more. Jimmy was already groaning in anticipation of having to carry his home.

"That'll weigh a ton by the time we get to Clintonia," he grumbled, as he eyed it with considerable apprehension.

"Hard to please some people," commented Herb. "You'd be kicking like a steer if you didn't have any to carry, and now you're sore because you've got enough to last all winter."

"Might as well leave enough for other people," said Jimmy, with a spasm of generosity.

"There are more nuts here than will ever be picked," replied Herb. "For that matter, some other people are getting them now. I've heard them thrashing about in the brush for the last few minutes only a little way from here."

"Funny we don't hear voices then," said Joe.

"Perhaps they're deaf mutes," suggested Jimmy, and adroitly ducked the pass that Joe made at him.

The noise persisted and seemed to be coming

nearer and nearer. There was a crashing of bushes, as though some heavy body were being pushed through them.

"Seem to be making heavy weather of it," commented Herb. "Don't see why any one should make extra work for himself when there are plenty of paths through the woods. Now if—Look!"

His voice rose in a shout that startled his comrades.

They turned and looked in the direction of his pointing finger. And what they saw froze the blood in their veins.

A great shaggy bear had emerged from the brush into a path not more than a hundred feet away and was lumbering rapidly toward them!

CHAPTER II

AN EXCITING CHASE

For a single instant the boys stood motionless and silent, stupefied by the sudden apparition. Then, as though shocked by a galvanic battery, they woke to life.

"Quick!" shouted Bob. "To the bungalow! It's our only chance!"

Like a flash he was off, followed by his comrades. Even Jimmy's feet seemed winged, and they reached the porch in record time.

Frantically Bob grasped the knob of the front door. The door was locked. He threw himself against it, but his weight was not sufficient, and although the door groaned it refused to yield. He glanced at his comrades, surrounding him in a panting group, and then at the bear. The latter was still coming, and seemed to have increased his speed.

The roof of the veranda was supported by half a dozen wooden pillars.

"Shin up these!" shouted Bob, throwing his

arms and legs about one and setting the example.

In a trice they were all climbing desperately. Fortunately they had not far to go, for the roof of the veranda was not high. But they felt as though they were in a nightmare, and although they were really making surprisingly good time, it seemed as though they would never get to the top.

Bob reached there first and swung himself over the roof. Not waiting a moment to rest, he rushed over to the post that Jimmy had chosen, reached over his hand and caught one of Jimmy's wrists. There was a mad scramble and then Jimmy lay on the roof, gasping.

Joe and Herb needed no help, as they had reached the roof only a second later than Bob.

For the moment at least they were safe, and they sat panting and trying to get their breath.

And while with fast-beating hearts they are wondering how they are to escape from the monster below them, it may be well, for the benefit of those who have not read the preceding volumes of this series, to tell who the radio boys were and what had been their adventures up to the time this story opens.

Bob Layton was the son of a prosperous chemist who was a leading citizen of the town of Clintonia, a wideawake, thriving, little city with a population of about ten thousand. The town was located on the banks of the Shagary

River, and was about seventy-five miles from New York. Bob, at the time these incidents occurred, was in his sixteenth year. He was tall and well built, of rather dark complexion and frank, merry eyes that always looked straight at one. He was good in his studies and a leader in athletic sports among boys of his own age. He had a firm, decided character, and was always at his best in an emergency that demanded cool thinking and quick action.

His closest friend was Joe Atwood, whose father was a physician with a large practice. Joe was fair in complexion, while Bob was dark, and they differed in more than mere physical qualities. Joe had a fiery temper and was apt to speak or act first and think afterward, and Bob many times served as a brake on the impulsive temperament of his friend.

Herb Fennington was a year younger than Bob and Joe, and of a more indolent, easy-going disposition. He was full of fun and jokes and nobody could long have the blues when Herb was about.

A fourth member of the group was Jimmy Plummer, whose father was a carpenter and contractor and a highly respected citizen of the town. Jimmy was fat, red-faced and good-natured, with a special partiality for the good things of life. He had gained the nickname of "Doughnuts," be-

cause of his fondness for that famous product of the kitchen, and did his best to deserve the name.

Besides the liking that drew the boys together, there was an added link in their interest in radio, which by its wonders had taken a firm hold on their youthful imaginations. In delving into the mysteries of this new and fascinating science, they had been greatly assisted by the kindly help afforded them by the Reverend Doctor Dale, the pastor of the Old First Church of Clintonia. His suggestions had been of immense value in helping them to master the elements of the science, and whenever they got into a quandary they had no hesitation in appealing to him for help that was never refused.

What gave the boys an added stimulus was the offer by the member of Congress for the district in which Clintonia was situated of prizes for the best radio sets made by the boys themselves. The contest was open to all the boys residing in the Congressional district, and Bob, Joe, and Jimmy entered into it with enthusiasm. Herb, with his natural indolence, did not go into the competition and was sorry afterward that he had not. The first prize was a hundred dollars, and the second, fifty. To the boys this seemed a whole lot of money and well worth the winning.

It was hard work though, and made the harder by the obstacles put in their way by Buck Looker,

the bully of the town, assisted by Carl Lutz and Terry Mooney, two of his cronies almost as worthless as himself. Buck tried to wreck Bob's aerial and got a richly deserved thrashing in consequence. Later on the trio tried to steal Jimmy's set, but the radio boys got it back in a way that brought a good deal of discomfiture to the Looker crowd.

While the radio sets were in the making, an exciting incident occurred in town that drew the boys into a series of adventures. An automobile running wild and dashing through the windows of a paint and hardware store in the town gave Bob and Joe an opportunity to rescue the occupant, a Miss Nellie Berwick, and to learn her story of having been swindled out of some property by a rascal. How by the means of radio they got on the track of the scoundrel and forced him to make restitution, how they overcame all the machinations of their enemies and came out ahead in the competition, is told in the first volume of this series, entitled: "The Radio Boys' First Wireless; Or, Winning the Ferberton Prize."

Shortly after Bob had won the first prize and Joe the second, the radio boys went down to Ocean Point on the seacoast to spend the summer. A colony had been established there by several of

the Clintonia families, including those of the radio boys, and they had great fun on the beach and in the surf. Here too they made marked advances in their knowledge of radio, in which they were greatly helped by Brandon Harvey, the wireless operator at the Ocean Point sending station. How they repaid this by pursuing and capturing the man who had assaulted him and looted the safe at the station, what exciting adventures they met with in the pursuit and capture, how their knowledge of radio enabled them to send help to a ship in peril on which their own families were voyaging, are told in the second volume of this series, entitled: "The Radio Boys At Ocean Point; Or, The Message that Saved the Ship."

Their summer at Ocean Point was further marked by a gallant rescue of two young vaudeville performers who had been run down by reckless thieves in a stolen motor boat. How they finally brought these men to justice, how they managed to bring congenial employment to a crippled friend, and how in doing this they found scope for their own talents in the fascinating work of radio broadcasting, are told in the third volume of this series entitled: "The Radio Boys At the Sending Station; Or, Making Good in the Wireless Room."

And now to return to the boys, who found

themselves in the woods on the roof of the porch of the cottage where they had taken refuge from the pursuit of the bear.

That refuge promised to be only a temporary one and exceedingly precarious. The roof was none too strongly built in the first place, and had fallen into decay from stress of weather and lack of repairs. Already there was an ominous creaking as it sagged crazily under the weight of the four boys.

Beneath them was the bear, who looked up at them, his jaws slavering and his little red eyes flaming. He was an enormous beast, capable of tearing any one of them in pieces if he once got them within his clutches.

"If we only had a gun!" groaned Bob, as a terrifying rumbling came from the throat of the bear.

"I'd rather have a stick of dynamite to throw at his feet and blow him into kingdom come," muttered Joe, as he gingerly shifted his position to find a more solid support than the part of the roof that was sagging under him.

"If wishes were horses, beggars might ride," remarked Herb. "The question is what are we going to do?"

"Seems to me the question is what is the bear going to do?" put in Jimmy.

"What he'll do is plenty," said Joe. "He's got

us trapped good and proper, and the next move is up to him."

The bear himself seemed to be in something of a quandary as to what that next move was to be. He paced clumsily up and down before the veranda while he was making up his mind. But to the boys' dismay there was no sign that he was inclined to relinquish the prey that was so nearly within his reach.

Finally he seemed to come to a decision. He moved from one to the other of the pillars supporting the veranda roof, sniffing at each as if calculating which was the strongest. Then to the horror of the boys he threw his paws about one of the pillars and commenced to climb.

"He's coming up!" cried Bob, and even as he spoke they could see the shaggy hair of the beast's head come in sight on a level with the porch roof. "Up on the other roof, fellows! Maybe he can't follow us there."

The roof of the house proper extended over the side and front of the second story and there were several protruding points that offered support to the feet and hands. In addition there were shutters to the windows, the tops of which reached nearly to the roof.

There was a wild scramble for whatever support came nearest to hand. How the boys did it they could not for the life of them remember

afterwards, but somehow, with the spur given to them by the knowledge that the bear was close behind, they got up on the roof of the house, their clothes torn and their fingers bruised and bleeding.

"Let's go along the roof toward the back of the house," panted Joe. "There may be an extension kitchen there on which we can drop and then from there to the ground. It may not be so easy for the bear to get down after us as it has been to get up."

They followed this suggestion at once and made their way as rapidly as possible across the shaky roof. It would have been more prudent of them to have left some interval between them, but they were so excited that they did not think of that and crowded close on one another's heels.

Suddenly a shout rose from Bob.

"Back, fellows!" he cried. "The roof's caving in!"

But the warning came too late. There was an ominous cracking and splintering, and then with a roar a section of the roof collapsed, carrying the boys down with it.

CHAPTER III

AN AMAZING DISCOVERY

THERE was a chorus of shouts as the boys felt themselves falling, followed by a heavy thud as they brought up on the floor of the attic in a blinding cloud of dust and plaster.

They had been so close together that they all came down in a heap, in a waving confusion of arms and legs.

Fortunately the distance had been only a few feet, but it was enough to knock the breath out of them, especially out of Jimmy, who had the misfortune of finding himself at the bottom of the heap.

For a minute or two they were too dazed by the suddenness of the fall to speak coherently, or in fact to speak at all. Then gradually they disentangled themselves and got to their feet.

Their first sensation had been that of alarm and the second of shock. But after they had in some measure recovered from these, there came a third sensation of immense relief.

For what had seemed at first a disaster revealed itself as a blessing in disguise when they realized that at least they had escaped from their pursuer. They were inside the house and had a number of ways of escape through the doors or windows available to them. The tables had been turned, and now it was the bear that was at a disadvantage.

They rubbed their eyes to get the dust out of them, and had barely begun to see clearly when they heard a voice calling from outside the house. The accents were foreign and they could not catch clearly what was said, but the words, whatever they were, were promptly followed by a scratching and clawing that seemed to indicate that the bear was sliding down one of the pillars of the porch to the ground.

"We must warn him!" cried Bob. "The bear will get him, sure!"

They rushed down the stairs to the ground floor and looked through one of the front windows. At a few yards' distance stood a man, short and stocky and of a swarthy complexion. A bandana handkerchief was wound around his head and earrings dangled from his ears.

As they looked, the great body of the bear dropped from the lower part of the pillar to the ground, and the beast turned and rushed toward the man.

"He'll be killed!" yelled Joe, in great apprehension. "Killed right before our eyes! Why doesn't he run? Can it be that he is blind?"

They all shouted in unison to warn the newcomer of his danger.

Then an amazing thing happened. The man not only stood his ground, but advanced toward the bear. The huge brute reared on his hind legs and threw his great paws over the man's shoulders. But even while the boys shuddered at the nearness of the tragedy that seemed about to be enacted, the man laughed joyously and passed his hand caressingly over the shaggy head and playfully pulled one of the brute's ears.

The boys looked at each other in amazement. The look gradually changed from one of wonderment to one of sheepishness. Then Bob turned the lock of the front door, threw it open and stepped out on the porch.

"Hello there!" he called.

The man turned around and looked at him in surprise. It was evident that he had not known until that moment that there was anybody in the house.

"Hello, you'sel'!" he replied, with a smile that showed a row of gleaming white teeth.

"Is that your bear?" inquired Bob, while his comrades, who had also come out on the porch, taking care, however, to leave the door open in

case a quick retreat should seem desirable, clustered about him.

"Sure data mya bear," was the response. "He verra gooda bear. He dance an' maka tricks while I sing and we maka lota da mon. Mya name Tony Moretto. I coma from da Italy two, nearly tree years ago. I spika da Inglis good," he continued, with evident pride in his accomplishments.

"Doesn't he ever get cross and ugly?" asked Bob. "He looks as though he could eat you in two mouthfuls."

"What dat?" asked Tony, in a tone of aggrieved surprise. "Bruno get ugly? Nevair! He verra tame." And to prove it, he thrust his hand into the bear's mouth and took hold of his tongue.

Instead of this evoking any protest, Bruno took it as part of a game, and acted just as a big good-natured mastiff might while romping with his master.

"You see," said Tony, with evident pride. "He lova me. I show you how he minda me."

He gave a word or two of command and began a monotonous chant, to the notes of which the bear began to dance with an agility that was surprising in so clumsy an animal. Then he lay down and played dead, turned somersaults and went through his whole repertoire of tricks for,

the edification of the boys, who looked on with very different emotions from those they had felt only a little while before.

"What I tella you?" said Tony complacently. "Bruno verra nice bear."

"What made him chase us then?" asked Joe. "We thought he was going to eat us alive."

"He chasa you?" said Tony, in surprise. "No, no. You mus' be mistake. He wan' to maka frens—to playa wi' you. Dat' ees it. He tink eet was a game."

"I wish we'd known that half an hour ago," murmured Joe to his companions. "It would have saved us a whole lot of trouble."

"How did he come to get away from you?" asked Herb.

"I verra tired," answered Tony. "I go sleepa in de woods. When I waka up I no finda him. He hunt for grub in da woods. Den he seea you and try to maka frens wi' you."

He took a chain from his pocket and fastened it to a collar on the bear's neck.

"Coma, Bruno," he said. "We go now."

"Wait," called Bob, and he and his companions emptied their pockets of what loose change they had and pressed it on the Italian, who at first shook his head.

"No," he said. "Bruno maka you much trub-beel."

"Never mind that," replied Bob. "You've given us a good show, and this will buy some grub for Bruno. He's a good old sport, and we don't bear him any malice, even if he did give us the scare of our lives."

He was so insistent that Tony finally pocketed the money, and with a smile and another flash of his white teeth trudged off through the woods with Bruno lumbering along clumsily beside him.

The boys watched the pair until they were out of sight and then turned and looked at each other. Then the comical aspect of the whole affair appealed to them and they burst into inextinguishable laughter.

"Stung!" cried Bob, when at last he could get his breath. "Stung good and plenty."

"Running away like all possessed when the bear was only lonely and wanted company," gasped Joe, wiping his eyes.

"He lova us, he wanta maka frens with us," chuckled Herb, and again they went into convulsions of mirth.

"Well, fellows," said Bob, when they had regained some degree of composure, "there's no doubt but that the joke is on us. But, after all, we've nothing to reproach ourselves for, because we're not mind readers and couldn't be supposed to know Bruno's intentions when he came gallop-

ing toward us. There isn't a man on earth who wouldn't have done just as we did under the circumstances."

"We can't say we haven't had excitement enough for one day," remarked Jimmy. "Gee, I feel as though I'd been drawn through a knothole. When you fellows came down on me in the attic, I felt sure that you'd drive me through the floor."

"We showed good judgment in letting you fall first," said Joe, with a grin. "It was as good as falling on a rubber cushion."

"I guess I was born to be the goat," sighed Jimmy. "I'll bet I'm black and blue all over."

"It's a safe bet that we're all pretty tired and sore," said Bob. "And that's too bad too, for we've got a lot of work to do before we leave this old shebang. And we won't have any more than time to do it, for it's getting on pretty late in the afternoon."

"What do you mean?" asked Herb. "Seems to me we've worked hard enough for one day."

"All the same we've got to fix up that roof before we go," explained Bob. "It wouldn't be fair to leave it open to the wind and rain after we smashed it in."

"I tell you what!" exclaimed Herb, struck with a bright idea. "Jimmy's the one to do that to the queen's taste. He's had a lot of experience

in his father's carpenter shop, and he could make a far better job of it than any of us could. It'll be a real treat to see him go at it."

"Sure," said Jimmy sarcastically. "Just the thing. I told you that I was the goat. But all the same don't you try to hold your breath till you see me do it."

"We'll all go at it," declared Bob. "And we'll get it done in jig time. Probably it won't be done like cabinet work, but we can make it reasonably tight and snug just the same. Come along now and let's get busy."

They picked themselves up and made their way to the attic and set to work. They were hampered at first by lack of tools, but search of the house brought to light a couple of rusty hammers and saws, and they managed to make a fairly good job of it. At least they had made it secure against rain or snow, and that was all they could hope to do under the circumstances.

The sun was getting low in the western sky as they were putting in the last nails. Suddenly Herb stopped and listened.

"Who's that calling?" he asked.

CHAPTER IV

THE BULLY APPEARS

JOE went to a window in the side of the attic and peered out. Then he gave a low whistle.

"What's the game?" inquired Bob curiously.

"It's Buck Looker and his gang," replied his chum. "How in the world did they happen to get here just at this minute? Five minutes more and we'd have been gone."

"Now I suppose it will all come out about the bear," said Herb regretfully. "I was hoping we could keep that to ourselves."

"Perhaps it's just as well," said Bob thoughtfully. "We'd have to explain anyhow how we came to fall through the roof, and of course we'd tell the truth about it. What we've done now is only a makeshift job, and we'll have to get some carpenter to make a perfect thing of it at our expense. That's the only fair thing to do."

"Hello, up there!" came a voice from below, which they recognized as Buck Looker's. "Who's up there and what are you doing?"

Bob, who had come up to Joe's side, thrust his head out of the window.

"Some of my friends and myself are here," he answered. "We broke through the roof of the house and we've just been fixing it up."

"Broke through the roof!" came in a gasp from below. "What business did you have on the roof of my house? You're going to get into trouble for this."

"Oh, I don't know," replied Bob. "We're not worrying much about it."

"Well, you'd better worry," growled Buck truculently. "You come right down and get out of my house as fast as your legs can carry you or I'll—I'll——"

"Yes," said Bob quietly, "go right ahead with what you were going to say, Buck Looker. You'll do what?"

Buck hesitated, for there was a note in Bob's voice that he did not like.

"You'll see what I'll do," he blustered. "You get right out of my house."

"Now listen, Buck Looker," replied Bob. "We're going to get out of this house for just two reasons. The first is that there's nothing especially attractive to keep us here, and the second is that we've finished our work and were just about to go anyway. But don't fool yourself into thinking that we're going because you tell us to."

If your father told us to, we'd have to, because it's his property. But it isn't yours and what you say doesn't interest us a little bit. Get that?"

There was a growling response, of which they did not catch the words, and Bob turned to his companions.

"Come along, fellows," he said. "Let's go down and see what this terrible man-eater and his cronies are going to do to us."

"I only wish they'd give us an excuse for pitching into them," said Joe. "I've been aching to give Buck Looker a licking ever since that time Mr. Preston came along and stopped us."

"No chance," laughed Bob. "Buck is prudent enough when any one comes face to face with him. As a long distance fighter he's a wonder, but he wilts fast enough when a scrap seems coming."

The radio boys brushed off their clothes, restored the tools to their places, and went downstairs and out on the front porch, where they found the bully and his friends in close conversation.

"It's time you got out of here!" exclaimed Buck. "My father will have something to say about this, and maybe he'll have you all arrested for burglary."

At this the boys could not help laughing, and

Buck's face grew red with fury, while a venomous light glowed in his mean eyes.

"You'll laugh out of the other side of your mouths when you find yourselves in jail," he shouted.

"Now look here," burst out Joe, taking a step toward him, "you've gone quite far enough. You keep a civil tongue in your head, or I'll give you what I've owed you ever since Mr. Preston came between us. And there's no Mr. Preston here now."

Bob put a restraining hand on his friend's arm.

"Easy, Joe," he counseled.

Then he turned to the bully.

"We don't owe you any explanation, Buck Looker," he said, "but we do owe one to your father, and you can tell him what we say. We were chased by a bear who had wandered away from his master. We chose this house for safety because it was the only place at hand and we couldn't do anything else. First we got up on the roof of the porch, but the bear came after us there and we had to take to the roof of the house itself. While we were going across it, part of it caved in and let us down into the attic. Afterward we tried to repair the damage for the time, and you can tell your father that we will pay whatever is necessary to make the roof as good as it was before."

"Chased by a bear!" repeated Buck, with a sneer. "That's a likely story. There hasn't been a bear around these parts for a hundred years. Tell that to the marines."

"I suppose that means that I'm telling a falsehood," said Bob, his eyes taking on a steely glint.

"I didn't say that," muttered Buck, as he stole a glance at Bob's clenched fist. "But you can tell that to my father and see if he believes it."

"He can believe it or not as he sees fit," replied Bob. "Come along, fellows."

"Just notice that we're going of our own accord," put in Joe, as he prepared to follow his friend down the steps. "Don't you want to throw us off the porch or any little thing like that?" he inquired politely, pausing a moment for an answer.

But the only answer was a snarl, and the radio boys left the bully there and went on to the place a little way off where they had dropped their bags when the bear came upon them.

Jimmy, who was in the van, suddenly gave a cry of dismay.

"The bags are gone!" he exclaimed. "I dropped mine right here, and now there are no signs of it."

"And mine was close by this tree," cried Herb. "That's gone too."

They hunted about for a few minutes, but the search was fruitless.

"Look here!" exclaimed Joe, at last. "Those bags didn't walk away of their own accord. Somebody's taken them."

"And after working all day to fill them!" groaned Jimmy.

"Say, fellows," said Bob. "The only ones that have been around here have probably been Buck Looker and his gang. There's the answer."

"But they didn't have any bags with them," interposed Herb.

"They could have hidden them, intending to come back after dark and get them," replied Bob. "I'm going to question them anyway. Buck Looker isn't going to put anything like that over on us."

"They'll only lie out of it," prophesied Jimmy pessimistically.

"We can see from the way they talk and act whether they are lying or not," returned Bob. "At any rate I'm going to take a chance."

They all went back rapidly toward the house, and reached there just in time to see Buck and his cronies vanishing around the back.

"They've seen us coming and tried to dodge," cried Joe.

"That won't do them any good," replied Bob,

quicken his speed. "We can beat them running any day."

The truth of his words was quickly demonstrated when they drew up abreast of the three, who slowed to a walk when they saw it was no use trying to evade their pursuers.

"What are you running away for?" queried Bob, as he stepped in front of Buck.

"None of your business," answered Buck snappishly. "I might ask you what you are running for."

"And if you did, I'd tell you mighty quick," answered Bob. "I was running after you to ask you what you did with the bags of nuts you found under the trees."

Buck tried to put on a look of surprise, but the attempt was a failure.

"I—I don't know what you're talking about," he stammered.

Every tone and every look betrayed that he was not telling the truth, and Bob went straight to the point.

"Yes, you do," he retorted. "You know perfectly well what I'm talking about. You found those bags under the trees where we had dropped them when the bear chased us, and you've hidden them somewhere intending to come back for them later. We've got you dead to rights, and you'd better come across and come across quick."

Buck hesitated a moment, but the look in Bob's eyes told him what was in store for him if he refused, and again he concluded that discretion was the better part of valor.

"Oh, were those yours?" he said, with an affectation of surprise. "We did find a few nuts and laid them aside for the owners if they should come back for them. I had forgotten all about it."

"It's too bad that your memory is so poor," remarked Bob grimly. "Suppose you come along and show us where you laid them aside so carefully for their owners."

Again Buck hesitated and seemed inclined to refuse, but the menace in Bob's eyes had not lessened, and he reluctantly shuffled back to the woods in front of the house and pointed out a hollow tree.

"There you'll find your old nuts," he snarled viciously. "That is, if they are yours. Ten to one they belong to somebody else." And with this Parthian shot, which the boys disregarded in their eagerness to regain their property, he slunk away, followed by Lutz and Mooney, the discomfited faces of the three of them as black as thunder clouds.

CHAPTER V

A STARTLING ACCUSATION

ELATED and triumphant, the radio boys shouldered their bags and set out for home.

"This is the end of a perfect day," chanted Joe, as they trudged along, tired in body but light in heart.

"For us perhaps, but not for Buck and his crowd," chuckled Herb.

"And those sneak thieves were the fellows who were talking about burglars," laughed Jimmy.

The sun had gone down before the radio boys left the woods, and it was full night by the time they reached their homes and disburdened themselves of their load of nuts.

"I was going to ask you fellows to come around to-night and listen in on the broadcasting concert," said Bob, as they reached his gate; "but I guess our folks will be so much excited about the bear that they can't talk or think of anything else."

"That's bearily possible," chuckled Herb, and

grinned at the indignation of his companions at the pun.

"But I think there'll be something doing at church to-morrow on the subject of radio," continued Bob. "You fellows must be sure to be there. I heard Doctor Dale talking about it to father."

"I'll be there if I can wake up in time," said Jimmy. "But just now I feel as if I could sleep through the next twenty-four hours straight. I'll be like one of the seven sleepers of Pegasus."

"Ephesus, I guess you mean," laughed Bob. "Pegasus was a horse."

"Is that so?" replied Jimmy. "Well, that's a horse on me. Don't hit me," he begged, as Bob made a pass at him. "I'm stiff and sore all over, without having that big ham of yours land on me."

Bob laughed and went up the steps, while the others made their ways to their respective homes not many doors away.

As they had anticipated, the telling of the adventures that they had gone through that day was listened to with breathless interest by all the members of their families. At places in the story there was laughter, but more frequently there were exclamations of alarm mingled with great relief that they had come through safely.

"I tell you," said Bob, as he finished telling of the matter to his parents, "I felt mighty cheap to think that I had run like mad from a bear that, as the Italian said, was simply trying to 'maka frens' with me."

"It was rather amusing after it was all over," assented his father, with a smile. "But after all you were very wise to act as you did. It isn't by any means certain that the bear would have been as friendly with you as he was with his master, and resistance of any kind might have awakened all his savage instincts. I am very doubtful about the bear thinking it was only a game when he was climbing up after you. But even if he did, you had no reason to suppose it. For all you knew he might have escaped from a circus or menagerie and might have been ready to tear you in pieces."

"That was my first thought; that is, as soon as I could think calmly about anything," answered Bob. "But, after all, a miss is as good as a mile, and he didn't get us. He came mighty near it though."

"The most serious outcome of the whole thing will probably be the matter of the broken roof," said Mr. Layton meditatively. "It will probably cost considerable to put it in perfect shape again. But, after all, that doesn't count for anything as

long as you boys weren't hurt. I'll see Looker about it on Monday and fix the matter up with him."

"And of course the fathers of the other fellows will chip in on the expense," said Bob. "I'd like to hear what Buck is telling his father about it to-night," he continued, with a grin. "By the time he gets through, we'll have pulled the whole house down."

The next morning all the boys were at church in time for the morning service, even Jimmy, who walked very stiffly and smelled strongly of arnica.

"You fellows needn't sniff as though I had the plague," he protested, as his friends lifted their nostrils inquiringly. "I was the fellow who was underneath when you fell on me like a thousand of brick. You got off easy, while I had all the worst of it. But then I'm used to that," he concluded, sighing heavily.

"Cheer up, old boy," said Joe, clapping him on the back, at which poor Jimmy winced. "The first hundred years is the worst. After that you won't mind it. But now we'd better get in if we want to sit together, for there's a bigger congregation here than usual."

Doctor Dale, the friend and counselor of the boys in radio, as in many other things, was in the pulpit. He was a very eloquent preacher and was always sure of a good congregation. But as

Joe had said, the church was even fuller than usual that morning, and there was a general stir of expectancy, as though something unusual was in prospect.

The attention of the boys was attracted at once by a small disk-like contrivance right in front of the preacher's desk. It had never been there before. They recognized it at once as a microphone, but to the majority of the audience its purpose was a complete mystery, and many curious glances were fixed upon it.

There were the customary preliminary services, and then Doctor Dale came forward to the desk.

"Before beginning my sermon this morning," he said, "I want to explain what will seem to some an unusual departure from custom; but which I hope will justify itself to such an extent as to become a regular feature of our service.

"There is no reason why the benefits of that service should be confined to the persons gathered within these four walls. There are thousands outside who by the means of radio, that most wonderful invention of the present century, can hear every word of this service just as readily as you who are seated in the pews. The prayers, the hymns, the organ music, the sermon, the benediction—they can hear it all. The only thing they will miss will be the privilege of putting their money in the collection plate."

He paused for a moment, and a smile rippled over the congregation.

"I have said," he resumed, "that they can hear it. And if they can hear it, they ought to hear it—that is if they want to. This is no new or untried idea. It is being carried out to-day in Pittsburgh, Washington, and other cities. The pulpit becomes a religious broadcasting station, from which the service is carried over an area of hundreds of miles. Everybody within that area who has a receiving set can hear it if they wish. In some cases it is estimated that more than two hundred thousand people are enjoying at the same moment the same religious service. You can see at once what that means in immeasurably extending the usefulness and influence of the church.

"Now it has occurred to me that we might do here what is being done elsewhere on a larger scale. So, after a conference with the officials of the church, an adequate sending set has been installed in the loft of the building. What is said here is sent from this microphone to the loft, where it is flung out into the ether. Arrangements have been made with a number of churches in this county, too poor and small to have a regular pastor, by which they have installed loud speaker receiving sets in their buildings. At this moment there are a dozen scattered congregations where the people have gathered to worship, and

where at this moment they are hearing everything that is said just as plainly as you do.

"And in addition to that," he went on, "in hundreds, perhaps thousands of homes, people who cannot go to church because of illness or some other reason are listening to this service. The sick, the crippled, the blind—think of what it means to have the church brought to them when they cannot go to the church. You in the pews are the visible congregation. But outside these walls there is to-day an invisible congregation many times greater, to whom this service is bringing its message of help and healing."

With this prelude, Doctor Dale announced his text and preached his sermon, which, if anything, was more eloquent than usual. It seemed as if he were inspired by preaching to the greatest audience that he had ever had in his whole career, and the audience in the pews also felt a thrill as they thought of the invisible listeners miles and miles away. It seemed as though the natural were being brought into close connection with the supernatural, and the impression produced was most powerful.

If the doctor had had any misgivings as to the attitude of his people toward this new departure, these were quickly dissipated by the cordial congratulations and approval that were expressed after the service was over and he moved about

among them. It was the universal opinion that a great advance had been made and that the innovation had come to stay.

The radio boys had been intensely interested in this new application of their favorite study, and after the sermon they went up into the loft and examined the apparatus that had been used in sending. It was a vacuum tube set with two tubes and power enough to send messages out over the whole county. It had been set up by Dr. Dale himself, and that was proof enough for the boys that it had worked perfectly in sending out the morning service.

"What will radio do next?" asked Bob, as the boys were walking homeward.

"What won't it do next is the way you ought to put it," suggested Joe. "It seems as if there were no limit. There are no such things as space and distance any more. Radio has wiped them out completely."

"That's true," chimed in Herb. "The earth used to be a monstrous big thing twenty-five thousand miles round. Now it's getting to be no bigger than an orange."

"What a fuss they made when it was proved that one could travel around the world in eighty days," said Jimmy. "But radio can go round the earth more than seven times in a single sec-

ond. Just about the time it takes to strike a match."

"Gee, but I'm glad we weren't born a hundred years ago," remarked Bob. "What a lot of things we would have missed. Automobiles, locomotives, telegraph, telephone, phonograph, electric light——"

"Yes," interrupted Joe, "and radio would have been the worst miss of all."

"They're doing in the colleges now, too, something very like what the doctor did in the pulpit this morning," said Bob. "In Union College and Tufts and a lot of others the professors are giving their lectures by radio. Talk about University Extension courses! Radio will beat them all hollow. Think of a professor lecturing to an audience of fifty thousand, instead of the hundred or so that are gathered in his classroom. And think of the thousands of young fellows who are crazy to go to college and haven't the money to do it with. They can keep on working and get their college education at home. I tell you what, fellows, Mr. Brandon was right the other day when he said that the surface of radio had only been scratched so far."

The next day at school the boys found that the story of their experience with the bear had had wide circulation, chiefly through the activity of

Buck Looker, who took care at the same time, however, to express his belief that nothing of the kind had happened. There was a good deal of good-natured joking, and the boys in self-defense had to explain the whole thing in all its details.

At recess their story received unexpected confirmation, for there, just outside the school yard, was Tony putting Bruno, the bear, through his tricks while a breathlessly interested crowd gathered about the pair. Tony grinned at the boys when he saw them and Jimmy asserted that Bruno grinned too, but the rest of the radio boys thought that that was due to Jimmy's excess of imagination.

A noticeable feature of the school work that day was the scarcity of pupils. All the classes were more or less sparsely attended, and the teachers were called to a conference with Mr. Preston, the principal.

"What do you suppose the powwow of the teachers was all about?" asked Bob, as the boys were going home after the session of the school was ended.

"About so many fellows being away," replied Joe, who, as his father was the leading physician of the town, was better informed than were his friends as to the situation. "Dad says there's an awful lot of sickness in the town. He's kept busy day and night, and scarcely has time to breathe."

"I wonder what the reason is," remarked Herb.

"Dad thinks the water supply may have something to do with it," answered Joe. "He says there's a regular epidemic of typhoid fever, and that usually comes from impure water. He's called the attention of the town council and the engineers of the reservoir to the matter, and they're going to have an investigation. Dad says it may even be necessary to close the schools for a time."

"What's that?" exclaimed Jimmy, with sudden animation.

"Don't tell Jimmy anything like that," mocked Herb. "It would simply break his heart. If there's anything he's stuck on it's school."

"You fellows wouldn't be tickled to death either if you thought you were going to get a vacation, would you?" retorted Jimmy. "I know you birds."

"Say, wouldn't it give us lots of time for radio!" said Bob enthusiastically. "I want to get all the new wrinkles in that latest set of ours, and we don't have time to do it in the few evenings we can spare from our home work."

"You bet," agreed Herb. "I don't want there to be any more sickness, but I sure do hope they find it necessary to close the schools. That would be just what the doctor ordered—in more senses than one."

"I wouldn't shed any bitter tears myself," admitted Joe. "There's going to be a meeting of the Board of Health to consider the subject soon, and I'll give you fellows the tip the minute I hear anything definite about what they decide to do."

"In the meantime, suppose you fellows drop around this evening for a little while," suggested Bob. "I want to try out some long distance receiving and listen in on Chicago."

All agreed to be there at about eight o'clock.

The Laytons had barely finished dinner that night when the door bell rang. Bob answered the bell.

He was surprised to find that the callers were Mr. Looker and his son Buck. Both had dark and angry looks on their faces.

"I want to know," said Mr. Looker abruptly, "what you and your companions mean by burning down my cottage!"

CHAPTER VI

THE BURNED COTTAGE

"NONSENSE!" exclaimed Bob. "What makes you think we'd do a trick like that?"

"Never mind about that!" exclaimed the elder Looker, furiously. "I supposed you'd deny it. I want to see your father, young man."

"Here he is," and Mr. Layton, who had been attracted to the door by Mr. Looker's loud and angry tones, emerged on to the porch. "What can I do for you, Mr. Looker?"

"You can pay me for my house that your boy and his companions burnt down," said Mr. Looker in angry tones.

"I rather think you must be mistaken," said Mr. Layton. "What grounds have you for making such a serious accusation?"

"My boy caught them red-handed after they'd broken into the house, and made them get off my property. It wasn't six hours later that the place was burned, and there's no doubt in my mind that your boy and his friends set it on fire just to get

that we were all here listening to radio that entire evening."

"Yes, I remember that," nodded his father. "And I guess that would be a pretty convincing alibi if Looker really should carry the case to court. My opinion is, though, that he's just bluffing, and we'll never hear any more of it."

"I wish I did know who *was* responsible," speculated Bob. "Do you really think tramps were responsible, Dad?"

"Very likely. Several barns have been burned in this neighborhood from the same cause, you know. I'm rather sorry that you and your friends were around there the same day it happened, because unless the real cause is discovered the Lookers will never stop talking about it. However, it's a small matter and we'll not think any more about it. From what you tell me, the place must have been falling apart, anyway."

"I should say so," laughed Bob. "We were a surprised bunch when that roof caved in with us. The place was so rickety it's a wonder it didn't all come down then."

"I'll bet you were a scared bunch," bantered his father, a twinkle in his eyes.

"I'll say we were," admitted Bob, honestly. "If we'd had a gun with us, it would have been a different story, though. Tony would have been out one large, brown bear."

"It's just as well you didn't," said Mr. Layton, dryly. "We'd have had Tony threatening a lawsuit, too, if you had killed his pet bear."

"It would have been a shame to do it," admitted Bob.

For a few minutes they both sat silent, each busy with his own thoughts.

"I expect I'll have to be away from home most of next week, Bob," said Mr. Layton, at length. Bob looked at him expectantly, and he continued. "There is a store at Mountain Pass being offered at a bargain, and I'm strongly tempted to buy it and operate it as a branch. I'm going to look the ground over, anyway, and if it looks as good then as it does now, I think I'll buy."

"That will be fine!" exclaimed Bob. "I've heard a good deal about that place lately, and it seems to be getting more popular all the time. If you go will you take mother with you?"

Mr. Layton nodded, and waited expectantly for the question that he knew was coming. Nor was he wrong.

"How about taking me along, Dad?" said Bob, eagerly. "It will be a peach of a trip. They say the scenery through Mountain Pass is the best ever."

"Well, I've thought of that, too, because I was pretty sure you'd want to come. But I'm afraid they'll have you too busy in the high school this

that we were all here listening to radio that entire evening."

"Yes, I remember that," nodded his father. "And I guess that would be a pretty convincing alibi if Looker really should carry the case to court. My opinion is, though, that he's just bluffing, and we'll never hear any more of it."

"I wish I did know who *was* responsible," speculated Bob. "Do you really think tramps were responsible, Dad?"

"Very likely. Several barns have been burned in this neighborhood from the same cause, you know. I'm rather sorry that you and your friends were around there the same day it happened, because unless the real cause is discovered the Lookers will never stop talking about it. However, it's a small matter and we'll not think any more about it. From what you tell me, the place must have been falling apart, anyway."

"I should say so," laughed Bob. "We were a surprised bunch when that roof caved in with us. The place was so rickety it's a wonder it didn't all come down then."

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"Well, I've thought of that, too, because I was pretty sure you'd want to come. But I'm afraid they'll have you too busy in the high school this

term for us to manage it. I may have to be gone two or three weeks, and that would be a serious break in your studies."

Bob urged and pleaded, but his father was adamant, and at last Bob was forced reluctantly to give up the idea of going.

When he told the other radio boys about the visit of the Lookers, they were as indignant as he.

"'Like father, like son,'" quoted Joe. "They're two of a kind, that pair. But I guess they didn't get much satisfaction out of your father, Bob."

"I should say not!" laughed Bob. "If they had said much more, I think we'd have treated ourselves to the pleasure of throwing them into the street."

Bob then told them about his father's projected trip to Mountain Pass, and his disappointment at not being allowed to accompany his parents.

"That's pretty tough," said Jimmy, sympathetically. "I know how you must feel. It would be a swell trip, and they say the meals at the Mountain Rest Hotel up at Mountain Pass are about the best ever."

"There you go!" exclaimed Bob, laughing. "It's a lucky thing for the hotel that you're not going. They'd lose money on you, sure as shooting."

"Well, I'd try to get my money's worth," said Jimmy, complacently.

"You'd get it, too, no fear of that," said Joe, confidently.

When this conversation took place, the boys never dreamed that they might all be going to Mountain Pass together in the near future. But as events shaped themselves in the next few days, this began to assume an aspect of probability.

The epidemic of typhoid increased, and there was something nearly approaching a panic in Clintonia. Families began leaving the town every day, and Dr. Atwood, as head of the town Board of Health, finally issued orders that the schools must close until the epidemic had been gotten under control.

When Bob heard this news, he could not, in spite of the seriousness of the situation, suppress a feeling of exultation. With school closed, the main objection to his accompanying his parents to Mountain Pass was removed, and he had little doubt now that he could persuade them to take him.

The task was even easier than he had anticipated, for the Laytons, like all the other townspeople, were greatly alarmed over the rapid spread of the sickness, and when Bob broached the subject to them they readily consented to having him go with them.

"It's an ill wind that blows nobody any good," thought Bob, and hurried away to seek his friends and tell them the good news.

He found all three of them in a state of excitement equal to his own.

"Dad wants us all to leave town, too," declared Joe. "He says there must be something wrong with the water supply, and he wants us all away until the trouble has been located and remedied."

"My father says the same thing," said Herb. "The trouble is, that we'll have to go to different places, and that breaks up our combination for goodness knows how long."

"Maybe we could get our folks to let us all stick together and go to Mountain Pass with Bob," ventured Jimmy. "It seems too good to be true, though."

"It's an idea, anyway," declared Joe. "You certainly come out strong once in a while, Doughnuts. It won't do any harm to try, at any rate."

The others agreed with this, and that night besieged their parents to let them go to the mountain resort. They succeeded more easily than they had hoped, as the older people were too worried over the situation, and too busy packing up, to offer much resistance to the impetuous lads.

Early the next morning first Joe, and then

Herb and Jimmy, dropped into the Layton home, to report their success to Bob.

"Well, that's great!" exclaimed the latter. "Jimmy, you win the celluloid frying pan for making that suggestion yesterday."

"Huh! that's about as useful as anything I'll ever get from you Indians," snorted Jimmy. "I ought to make you pay in advance for my ideas, instead of giving them away so carelessly."

"You'll never get rich that way," remarked Joe. "But let's cut out the comedy, fellows, and get down to business. When are your folks going to start for Mountain Pass, Bob?"

"The day after to-morrow."

"Whew!" whistled Herb. "That means that we'll have to flash a little speed, doesn't it?"

"I sha'n't worry about that," grinned Bob. "I'm all ready to start this minute, so I'll sit back and watch you fellows hustle. It will be lots of fun."

"You won't be able to see me, on account of the dust I'll raise," announced Jimmy.

"You're going to stay at the Mountain Rest Hotel, aren't you, Bob?" asked Joe.

"Sure! It's the best hotel up there. The only one, in fact; though I believe some of the natives take a few people into their homes."

"By the way," said Herb. "Who's said anything to Mrs. or Mr. Layton about our joining

their party? Seems incredible, but maybe they won't want us."

"Gee!" gasped Joe. "I never thought of that. But maybe it's so."

"There's mother now," announced Bob. "Let's put it up to her."

This they did, and her son's three friends were assured by Mrs. Layton that if their parents were willing they should go she and Mr. Layton would be glad to have them in their party.

"That's fixed then," announced Jimmy. "I'm off now, fellows. Next stop, Mountain Pass."

CHAPTER VII

RADIO WONDERS

THAT day and the next were busy ones for the radio boys. The party was to go in two big automobiles that Mr. Layton had hired, and the boys had secured permission to take a small radio set with them. On the morning set for their departure they were ready to the last detail, and it was not long before they and their belongings were snugly packed into the two automobiles and they were all on their way to the mountain resort.

Although it was still only mid-autumn, the air had a keen edge to it, the sky was gray and overcast, and there was the indefinable feel of snow in the air. The big cars rolled crisply through long drifts of dead leaves, going at a lively pace, as it was quite a journey to the resort, with many steep grades to be encountered on the way. The boys were warmly wrapped, and the keen air only gave zest and added to their high spirits.

"These cars ought to be equipped with a radio set," remarked Bob, a short time after they had

started. "I saw a picture the other day of a car that was rigged up that way, with an antenna from the radiator to a mast in the rear."

"It's not a bad idea, at that," said Joe. "If a person were going on a long tour, he could keep in touch with the weather forecasts, and know just what to expect the next day."

"Yes, and when he camped for lunch, he could have music while the coffee pot was boiling," said Herb. "Pretty soft, I'll say."

"He'd be out of luck if the static were bad, though," observed Jimmy.

"Oh, it won't be long before they'll get around that static nuisance," said Bob. "Have you heard of the latest method of overcoming it?"

The others had not, and Bob proceeded to explain.

"At Rocky Point, Long Island, they put up twelve radio towers, each four hundred and ten feet high, in a row three miles long. Then they hitched up a couple of two hundred kilowatt alternators so that they run in synchronism. That means four hundred kilowatts on the aerial, and I guess that can plough through the worst static that ever happened."

"Four hundred kilowatts!" exclaimed Joe. "That's an awful lot of juice, Bob."

"You bet it is," agreed Bob, nodding his head. "But it does the work. When they tested out this

system signals were received in Nauen, Germany, of almost maximum strength, in spite of bad weather conditions. You know they have a numbered scale, running from nothing to ten, which is maximum. Well, the Rocky Point signals were classed as number nine, which means they were almost maximum strength."

"It must have been a terrible job to synchronize those two alternators," commented Joe.

"No doubt of it," agreed Bob. "This article stated that they had to experiment for months before they succeeded. Those machines turn over at somewhere around twenty-two thousand revolutions per minute, you know."

"About three hundred and sixty-six times a second," said Joe, after a short mental calculation. "Nothing slow about that, is there?"

"It's fast enough to do the trick, anyway," agreed Bob. "Wouldn't it be great to be in charge of a station like that?"

The others agreed that it would, and for some time they discussed this latest marvel of radio. Then their minds were drawn away by the wonderful scenery through which they were passing. The leaves still left on the trees were tinted in rich reds and browns, and as the big cars climbed to higher levels the party had some wonderful views of high hills and spreading valleys.

But the sky became continually more leaden

and overcast, and the drivers put on more speed in an effort to reach their destination before the impending storm should start. But they had gone only a short distance further when a few white flakes came swirling silently down from the leaden sky. Scattered at first, they rapidly increased in numbers until the air was filled with swirling sheets of white. The snow packed over the windshields and powdered the occupants of the two cars, and the drivers were forced to stop and put up the side curtains. The snow hissed through the branches of the trees and whispered to the dead leaves, making the only sound in a world that was rapidly changing from autumn brown to winter white.

With the side curtains adjusted as snugly as possible, the party resumed its journey. The fine, dry snow searched out every chink and opening between the curtains, penetrating in some mysterious manner where rain would have been kept out. In a surprisingly short time it had thrown a thick mantle over the road, and the cars began to feel the drag of ploughing through it. Another stop had to be made to put on tire chains, and by this time it was plainly to be seen that the drivers were becoming worried.

They had still about a third of the distance to cover, which included some of the worst grades in that part of the country. The road had changed

from smooth macadam to a rough trail that required careful driving even under the most favorable conditions, and now the snow, drifting into holes and depressions, hid them from sight, the first intimation of their presence being a jolt and slam as the wheels dropped into some pit that the driver could easily have avoided otherwise. The passengers were shaken about unmercifully, and had to hold fast to anything handy to keep from being thrown against the roof.

"Good night!" exclaimed Herb, as one particularly heavy jolt threw him from the seat and left him floundering on the floor. "We won't have any springs left on the cars by the time we reach the hotel, provided we ever do. I know people who have driven over this road, and they never mentioned its being so bad."

"So have I," said Bob, peering out through the side curtains. "My private opinion is, that we've gotten off the main road altogether. There was a fork a way back, and I thought then that the drivers turned in the wrong direction."

"That hardly seems possible, Bob," said Mr. Layton. "They are both experienced drivers, and are supposed to know this road like a book."

"Well, likely enough I'm wrong," said his son. "If they did take the wrong fork, though, I suppose they'll soon find it out and turn back."

But Bob was gifted with a keen sense of direc-

tion, and it was not long before the little party found that he had been correct in his surmise. The leading car halted, the other followed suit, and the drivers, beating their numbed hands together, held a conference in the road.

After a struggle with the fastenings of the side-curtain, Mr. Layton descended and joined them. The boys followed suit, leaving Mrs. Layton in sole possession of the two cars.

"We don't rightly know how it happened, sir," said one of the drivers, addressing Mr. Layton; "but somehow we've got off the right road in this confounded snow, and I guess there's nothing for it but to turn and try to get back on it at the place where we branched off."

"Well, let's do it then, as quickly as possible," said Mr. Layton, decisively. "The snow is getting deeper every minute, and we can't afford to lose any more time. I thought you men knew the road too well to make a mistake like that."

One of the drivers muttered something about "snow" and "can't see nothin' ten feet ahead," and they climbed into their seats, while the others scattered to their places inside.

The driver of the leading car stepped on the electric starter button, but instead of the engine starting there was a shock, a sharp snap of breaking steel, and the starter motor whirred idly

around with no more effect on the engine than one of the thickly fallen snowflakes.

The driver uttered a fierce exclamation. "There goes that starter spring again!" he exclaimed. "Now I'll have to crank the blamed engine every time I want to start for the rest of this trip."

He fished around under the front seat, produced a starting crank, and tried to turn the engine over by hand. In his haste, however, he had forgotten to retard the spark, and as he lunged down on the crank with all his strength, the motor backfired, the crank spun around several times, and the driver staggered back, his right arm hanging limp and useless.

CHAPTER VIII

A CLOSE SHAVE

MRS. LAYTON uttered a scream, and the others looked at each other a second with blank faces. Then they jumped out and surrounded the unfortunate driver, who was gazing at his injured arm in a dazed fashion. Mr. Layton made a quick examination, and pronounced that the wrist was badly sprained. Fortunately, they had a complete medical outfit in one of the cars, including splints, and Mr. Layton contrived to bind up the injured wrist after a fashion, and then suspended the arm in a sling.

"But who's going to drive the car?" asked the uninjured chauffeur, after this operation had been completed. "If none of you people knows how to drive, we're in a pretty bad fix."

"I'll drive," volunteered Bob. "You lead the way, and I guess I'll manage to keep near you."

"Are you sure you can do it, Bob?" questioned his father, anxiously. He had great faith in

his son's ability, and liked to have the lad take a certain amount of responsibility.

"Sure, Dad. Watch and see," was the quick answer.

"I don't know about this," said the chauffeur, with the professional's distrust of the amateur. "We could all pack in one car in a pinch, you know, and leave the other here."

"But that would so overload one car that we'd have very little chance of getting there without a breakdown," argued Bob. "Don't worry about my driving. I'll manage somehow."

"I'll bet you will," said Joe. "You'll have to move lively to keep from being run over," he told the driver.

"Quit your kiddin'," said the chauffeur, unbelievably. "We'll have to hit the high spots from now on, and it ain't goin' to be an easy job holdin' those boilers on the road."

Somewhat against his mother's will, Bob cranked the motor of the car he was to drive, but took care to see that the spark was fully retarded, in consequence of which he started the engine without any trouble. The injured driver occupied the other half of the driver's seat, so as to give Bob pointers in handling the car if they were needed.

But he soon found that Bob required very little of his advice. It was some time since he had

driven a car, and at first he was a little slow at gear shifting, but soon got the "feel" of that particular car and from then on shifted with the ease and deft certainty of an expert. As a matter of fact, Bob possessed the knack of handling machinery, without which no one can really claim to be a good driver.

The injured driver was not long in recognizing this. Shortly after they had reached the main road and were once more headed for their destination, they encountered a steep grade, something over a mile in length. Both cars were going at a fair speed when they felt the first tug of gravity, but so sharp was the grade that they lost way rapidly, and it became necessary to shift into a lower speed. Bob did not wait until they had slowed down too much. With a quick shove he disengaged the clutch, shifted into neutral, and then dropped the clutch into the engagement, at the same time accelerating the engine momentarily. This causes the idle gears on the jack-shaft to revolve, after which it is comparatively easy to mesh the intermediate gear combination. Bob had no difficulty in doing this, and with his gears properly engaged, he let in the clutch again and stepped on the accelerator. The car surged forward, ploughing through the snow and skidding from side to side as it fought its way up the steep gradient.

In a few moments they caught up with the leading car, which was in difficulties. Its driver had waited too long before attempting to shift, and the car had slowed down so much by the time he got into intermediate that it would not pick up even in that speed, and he was forced to shift into low.

"I'll bet that young feller that's driving Jim's car is stalled somewhere at the bottom of this hill," he thought. "Hope I don't have to wait too long for him after I reach the top. This road is no place for an amateur to drive, anyway. I——"

Honk! Honk! The raucous note of Bob's horn broke in upon his thoughts, and he glanced, startled, through the rear windows, to see the other car looming through the drifting storm.

Too late he tried frantically to speed up and avoid the humiliation of being passed by one whom he condescendingly termed an amateur. Resistless as fate the pursuing car drew abreast, and then went on past in a cloud of fine snow kicked up by the spinning rear wheels. He muttered morosely to himself as he caught a glimpse of grinning faces through the dim windows of the storm curtains, but was conscious of a feeling of admiration, too, for the daring young driver.

"Say, son, I've got to hand it to you!" ex-

claimed Jim, the injured chauffeur. "You know how to handle a car with the best of 'em."

"Oh, I didn't care so much about passing him, but I didn't want to slow down," explained Bob, never for an instant taking his eyes from the road. "It's against my principles to put on brakes when I'm going up a hill."

"I figure the same way myself," admitted the other. "Now that we're ahead, we might as well stay ahead. I'll tell you which way to turn, an' I guess between us we'll get through all right."

But many miles still lay between them and their destination, and the storm showed no sign of abating. Softly, silently, but implacably the white flakes continued to pile up that clinging carpet over the road until driving became more a matter of guesswork and instinct than anything else. For a time the injured chauffeur gave Bob directions and advice, but at length he came to the conclusion that this boy behind the wheel was very capable of doing the right thing in the right place, and he sat silent, gripping the seat and pressing on imaginary pedals when they got in tight places.

They were making good progress, considering the adverse conditions, and were within perhaps ten miles of their destination when suddenly, through the whirling snow, Bob glimpsed another car swinging into the main road not fifteen feet

from him. Both cars were going at a fast speed, but the drivers caught sight of each other at almost the same instant, and both jammed on their brakes. The cars swayed and skidded, and the occupants of both started from their seats, believing a collision inevitable. Nothing could have averted this had not Bob, quick as lightning, wrenched his wheel around, bringing his car into a course almost parallel with the other. For a few brief seconds the outcome lay in the hand of fate. When the two cars finally came to a jarring halt, they were side by side, with not six inches between their running boards.

The door of the other car, which was a sedan, burst open, and a small, red-faced and white-haired man leaped out and shook a belligerent fist at Bob.

"What do you mean by driving that car at such a rate of speed?" he shrilled. "You were breaking every speed law there is, young man, and I'll make you sorry for it, or my name isn't Gilbert Salper."

"But your car was going faster than ours, and there isn't any damage done, anyway," Bob pointed out, as he wriggled from behind the wheel and descended to the road.

"No damage done?" echoed the other, waving his hands excitedly. "You almost scared my wife and daughters into fits, and yet you have the

nerve to stand there and tell me there is no damage done. What do you mean by it?"

Before Bob could make an indignant reply, a lady wrapped in costly furs stepped from the sedan and laid a soothing hand on the irate old gentleman's shoulder.

"I'm sure it wasn't the young man's fault, Gilbert," she said, in a pleasant voice. "Indeed, I think it was his quick action that prevented a collision. Jules was at fault in coming on to the main road without slowing down or blowing his horn."

"They were both going too fast, I say!" insisted her husband. "But I suppose we ought to be thankful that we are still alive, after undertaking such a fool trip. Next time we'll do what I want and stay at home."

The gentleman fumed and fussed a little longer, but at length his wife and daughters succeeded in enticing him back into his car. The latter were both unusually pretty girls, and as they coaxed their father back into good humor, Joe, who was in the car driven by Bob, whispered that he hoped they were also bound for the Mountain Rest Hotel.

Mr. Salper was a wealthy Wall Street broker, whose pocketbook was much longer than his temper. Although irascible and prone to "fly off the handle" at the slightest provocation, he was

at bottom a kindly man, and one who would do anything for those he cared for. Like many others, his health had suffered in the process of money making, and his physician had ordered him to give up business for a month or two and rest.

The broker owned a house not far from the big hotel at Mountain Pass, and the family frequently came to the place, both in the winter and the summer. They were well known at the hotel itself for they often ran over to take meals there and to visit with some of the patrons.

By the time his daughters had succeeded in calming the broker's excitement, the second car of the Layton party came up, and it was decided that the three cars should keep close together for the rest of the journey, in order to render mutual aid if it should be needed. The snow had attained a depth of six or eight inches by this time, and it was only with the greatest difficulty that they even managed to start again. But finally they got straightened out and resumed their bucking of the hills and snow.

CHAPTER IX

BUCKING THE DRIFTS

It was heartbreaking work, for from that point on the road ascended steadily toward the top of the mountain, with hardly a level spot on it. A mile ahead lay the Pass, a narrow gorge in which the snow had drifted so deep as to make it almost impassable.

The car that Bob was driving was in the lead, and as they neared this dangerous place the disabled chauffeur gave him a word of advice.

"Open 'er wide, son," he counseled. "We'll have to buck drifts maybe two feet deep or more, and if we once have to stop, it means we'll stay there until somebody comes and digs us out. Give 'er all she'll take, and hold her on the road if you can."

Bob nodded, and opened the throttle little by little, while the chauffeur held his foot on the muffler cut-out pedal, in order to relieve the engine of all back pressure. Just before they

reached the Pass, by some freak of the wind the road had been swept clear of snow for several hundred feet, and this gave the car an opportunity to gather speed.

Faster and faster it flew, until the speedometer needle registered fifty miles an hour. Then through the driving snow the entrance to the Pass loomed ahead, and the chauffeur gave an exclamation.

Before them was a snowdrift that looked almost as high as their car, stretching solidly across the road and leaving Bob not the shadow of a chance to dodge. He set his teeth, opened the throttle to the limit, and gripped the wheel with wrists braced strong as steel bars.

The heavy car hurtled into the drift with the force of a projectile shot from a big gun, throwing clouds of snow in every direction as it bored resistlessly through. The car skidded and twisted in every direction, and it was a supreme test of Bob's strength and skill to keep the powerful machine on its course. Big rocks lined the road, and more than once they shaved past these with only inches to spare.

Resistless with its initial momentum, the big car was nevertheless gradually losing speed as it penetrated further into the drift and the passive but deadly resistance of the snow began more and more to make itself felt. The engine began to

labor, and Bob was on the point of shifting speeds, when suddenly the car broke through the further side of the drift, seemed to shake the clinging flakes from it, and began to pick up speed again.

Those composing the little party never forgot the gruelling battle against odds that followed. The blustering wind had piled the snow in great drifts in some places, and in others had swept the road so clean that the frozen brown earth **was** visible for some distance.

On these stretches they would pick up speed, and then charge into the drifts and repeat the former battle. Over and over they did this, Bob driving like a master, with steely blue eyes fastened grimly on the road ahead, jaws set, and a face that looked ten years older than it really was. Those in the car spoke words of encouragement from time to time, but he was too busy and concentrated on his task to answer with anything other than a brief nod.

For what seemed like an age they ploughed through one huge drift after another, with the high rocky walls of the Pass frowning down at them till at last the rugged hills fell back from the road, the air lightened, and they were through the Pass, with less than two miles between them and the warmth and shelter of the hotel. The road **now** ran along a high ridge, which the wind had

swept clear of snow, and Bob stopped the car and relaxed with a great sigh.

"Guess we'd better wait for the others to catch up," he said. "We broke a path for them, though, and it ought to be a lot easier for them than it was for us."

"You must be all in, Bob," said Joe. "You handled this car like an old timer, but now it's about time you had a relief. Why not let me take a hack at it for the rest of the way?"

But Bob laughed, and shook his head. "I wouldn't have missed that for a farm," he said. "It was hard work, but it was the best kind of sport, too. Besides, Jim here says that the road runs along this ridge almost to the doors of the hotel, and it will be easy sailing the rest of the way."

"I wonder what has become of the other cars?" said Mr. Layton, in a worried tone. "I hope nothing has happened to them."

He had hardly ceased speaking, when one of the automobiles appeared, so covered with snow that it was hard to believe that it was actually a car at all. Shortly afterward the Salper car appeared, came to a halt when its driver saw the other two at a standstill, and its French chauffeur descended and advanced stiffly to where Bob and the driver of the second Layton car were standing.

"Pah!" he exclaimed. "In all France there is no road like that which I have just traverse. I am hire to drive ze petrol car, not ze snow plough. It eez ze so great mystery zat we have arrive so far."

"Mystery is right," agreed Jim, the injured driver. "The only casualty up to date is my busted wing, which is a lot better than a busted neck. But you'd better get back in your glass house, Frenchy, because we're all frozen stiff, and the sooner we land at the hotel, the better. My arm feels as though it must be broken in twenty places."

The Frenchman looked doubtfully at Jim when he spoke of an injured "wing," but evidently set it down as being one more incomprehensible vagary of the English language, for he only shrugged his shoulders and returned to his car without comment.

The short day was drawing rapidly into night when the little party at last saw the cheerful lights of the hotel shining through the storm. Fifteen minutes later the lads were all seated in front of a roaring open fire in the big parlor and were telling their experiences to the amazed guests.

Bob was the only uncomfortable one in the crowd, as he heard everybody speaking in praise of the way he had risen to the emergency and

was thankful for more reasons than one when dinner was announced.

"Dinner!" exclaimed Jimmy, rapturously. "Bob, I've got to hand it to you. Not only do you get us here through a howling blizzard, but you land us just in time for a turkey dinner. Oh my, oh my!"

The Mountain Rest Hotel had a reputation for serving generous meals, and for this the boys were thankful that night. Through all the long, cold day they had eaten nothing but a few sandwiches, and now they strove to make up for lost time. Not in vain, either. Even Jimmy had to own up that he could not eat another mouthful, which was a statement he could seldom truthfully make.

Owing to the sickness in Clintonia, there had been an unprecedented rush of visitors to the hotel, and the Layton party discovered that they would have to take one of the small cottages adjoining the hotel, although they would board in the main establishment.

The cottage was snug and comfortable, however, and they were all delighted with it. Indeed, it was better for the radio boys than rooms in the hotel, because they could set up their receiving set more readily. Of course, it was out of the question to erect an outdoor aerial, but

they were not bothered by this and decided to use a loop aerial instead. They had brought with them a knock-down frame on which to wind their antenna, and this frame could be moved around and set against the wall when not in use.

The first night at Mountain Pass they had little thought, however, even for their beloved radio, and were content to tumble into bed shortly after dinner. But the next day they were up early, and after a hearty breakfast set to work to put up their set.

CHAPTER X

CONVINCING A SKEPTIC

IT was a simple matter for the boys to wind the loop aerial, for they had become expert in the manipulation of wire, tape, and the numerous other accessories that go with the art of wireless telephony. After the aerial was completed they unpacked their receiving set and quickly connected it up. They worked skillfully and efficiently, and before the lunch bell rang at noon they were ready to receive signals.

But even their enthusiasm was not proof against the seductive summons of the genial looking old darky who rang the bell, and they washed hastily and started for the dining room at a pace that would have reflected credit on the hungriest boarder who ever lived.

"Gang way, Bob!" panted Jimmy, as they clattered down the last flight of stairs and dashed for the entrance to the hotel. "I'm hungry, and, therefore, desperate. Get out of the way before I trip over you!"

"Good night!" shouted Bob. "You're getting

too fresh to live, Jimmy," and he picked up a handful of snow and dropped it carefully and with precision down Jimmy's fat neck.

"Ugh!" exclaimed that corpulent youth, stopping short in his wild rush and digging snow from under his collar. "I'll get even with you for that, Bob, you old hobo. Just you wait!"

"Can't wait a second," grinned Bob. "I don't want to be late and miss all the good things, even if you do."

"Come on, Doughnuts, don't stand there all day picking snow off you," entreated Herb. "I can't see where there's any fun in that."

Jimmy reached down, packed a handful of snow, and sent it flying after the others. They were close to the door, however, and ducked in unscathed, while the snowball spread out in a big patch against the door casing.

Jimmy did not allow himself to be delayed very long at any time when there was food in prospect, however, and his friends had hardly seated themselves at the table when he came in, his collar badly dampened, but his appetite in prime condition. He shook his fist surreptitiously at the others, but he was incapable of staying angry long, and was soon his usual jolly and happy-go-lucky self.

The snowstorm had stopped during the night, the weather had grown warmer, and a brilliant

sun now shone down on a dazzlingly white world. The snow had come ahead of time, as all the "regulars" at the Mountain Rest Hotel united in asserting, and now it gave every indication of disappearing as fast as it had come.

The boys wanted to get back to their radio set after dinner, but the snow looked so inviting that they could not resist the temptation to have a snow fight. Some of the men, seeing them hard at it, cast dignity to the winds and joined them, until quite a miniature battle was raging. Ammunition was plentiful, and there was a good deal of shouting and laughter before both sides became tired and agreed to call it a draw.

The radio boys were pretty damp with snow water, and their hands were stiff with cold, but trifling discomforts such as these did not bother them much. They had had a good time, and they knew that there is seldom any fun that does not have its own drawbacks. They went to their rooms, changed the wettest of their clothing for dry articles, and were soon ready to test their set.

They were just making a final inspection of their connections when Mr. Layton entered the room, accompanied by two other gentlemen.

Mr. Layton introduced the two latter as the owners of the store he was thinking of purchasing.

"Mr. Blackford and Mr. Robins are rather skeptical about radio," explained Mr. Layton, when the introductions had been duly accomplished. "I happened to mention it this morning, and as they both seemed to think I was exaggerating its possibilities, I asked them here to see and hear for themselves."

"It's no trouble to show goods," said Bob, grinning. "We haven't tested for signals yet, but the set is all hooked up, and I guess all we'll have to do is tune up and get about anything you want."

"You seem pretty confident," remarked one of the two strangers, Mr. Robins. "My opinion is, that this radio stuff is mostly bunk. A friend of mine bought a set just a little while ago, and he couldn't hear a thing with it. Paid fifteen dollars for it, too."

"I shouldn't imagine he could," said Bob, drily. "Mountain Pass must be at least a hundred miles from the nearest broadcasting station, and that set you speak of could never be expected to catch anything more than twenty-five miles away, at the most."

"Well, I'll bet dollars to doughnuts you can't hear anything with that outfit you've got there, either," broke in the other of the two strangers.

"You'd lose your money, Blackford," said Bob's

father. "Go ahead and convince these doubting Thomases, Bob."

Bob adjusted a headset over his ears and switched on the current through the vacuum bulb filament. Then he manipulated the voltage of the "B," or high voltage, dry battery, and also varied the current flowing through the filament by means of a rheostat connected in series with it. Almost immediately he caught a far-away sound of music, and by manipulation of the variometer and condenser knobs gradually increased the strength of the sounds.

Meantime Mr. Layton's two acquaintances had watched proceedings with open skepticism, and often glanced knowingly at each other. But suddenly, as Bob twisted the knob of the variable condenser, the music became so loud that all in the room could hear it, even though they had no receivers over their ears.

"If either of you two gentlemen will put these receivers on, he'll be convinced that radio is no fake," said Bob quietly, at the same time removing his headset and holding it out.

After a moment's hesitation Mr. Robins donned the receivers, and a startled look came over his face, replacing the incredulous expression it had worn heretofore.

"Let's hook up another set of phones, Bob, and

let Mr. Blackford listen at the same time," suggested Joe.

This was done, and soon both skeptics were listening to their first radio concert. Mr. Layton regarded them with an amused smile. Mr. Robins extended his hand curiously toward the condenser knob, and immediately the music died away. He pulled his hand hastily away, and the sounds resumed their former volume.

"Don't be frightened," laughed Mr. Layton. "It won't bite you."

"But what made it fade away in that fashion?" asked Mr. Robins.

"Don't ask me," said Bob's father. "I'm not up on radio the way the boys are. I enjoy it, without knowing much of the *modus operandi*."

"That was caused by what is known as 'body capacity,'" explained Bob. "Every human being is more or less of a natural condenser, and when you get near the regular condenser in that set, it puts more capacity into the circuit, and interferes with its balance."

The other nodded, although in reality he understood very little of even this simple explanation. He was too much absorbed in listening to what was going on in the phones.

As he listened, he heard the latest stock market quotations given out, among them being the last minute prices of some shares he happened to be

interested in. He slapped his knee enthusiastically, and when the last quotations had been given, he snatched off the headset and leaped to his feet.

"I'm converted!" he fairly shouted. "I'll buy this outfit right as it stands for almost any price you fellows want to put on it. What will you sell it for?"

The boys were taken aback by this unexpected offer, and all looked at Bob expectantly.

"Why, we hadn't even thought of selling the set," he said slowly. "We wouldn't sell it right now, at any price, I think. But when we leave here to go back home, I suppose we might let you have it. How about it, fellows?"

After some argument they agreed to this, but Mr. Robins was so determined to have the set that he would not be put off.

"Now look here," he said. "I'm a business man, and I'll make you a business proposition. I'll buy that outfit right now, before I leave this room, at your own figure. But you fellows can keep it here and have the use of it just the same as you have now, only it will be understood that I'll have the privilege of coming over here once a day in time to hear those market reports. At the same time you can teach me something about operating the thing. How does that strike you?" and he threw himself back in his chair and waited for his answer.

"We'll have to talk over that offer for a little while," said Bob. "Give us ten minutes or so, and we'll give you an answer."

"That's all right," replied Mr. Robins. "While I'm waiting I'll just put on those ear pieces again and see what's doing."

The radio boys left the room and held an excited conference downstairs. After some discussion they agreed to sell their set, as long as they could have the use of it during their stay at the resort, but the matter of price proved to be a knotty problem. Bob produced pencil and paper, and they figured the actual cost of the set to themselves, and then what the same set would have cost if bought ready made in a retail store.

"The actual material in that set didn't cost us much over forty dollars, but we put a whole lot of time and experience into it," said Bob. "It would cost him close to a hundred to get as good a one in a store."

"It's a mighty good set, too," said Joe, a note of regret in his voice. "We might make another as near like it as possible, and not get nearly as good results."

"Oh, don't worry. We're some radio builders by this time," Herb reminded him. "Besides, that isn't the only set we've got."

"Let's ask him eighty dollars," ventured Jimmy. "He'll be getting it cheaper then than he

could buy it retail, and we'll be picking up a nice piece of change."

"I think that ought to be about the right figure," agreed Bob. "Does that suit this board of directors? Eighty hard, round iron men?"

The others grinned assent, and they returned to the room where the older men were still seated about the radio set.

"Well, what's the verdict?" inquired Mr. Robins, glancing keenly from one to the other.

"We've decided to sell," replied Bob. "The price will be eighty dollars."

Without a word Mr. Robins produced a roll of greenbacks, and counted off the specified amount in crisp bills.

"You'll want a receipt, won't you, Robins?" inquired Mr. Layton.

"Not necessary," replied the other. "I've got a hunch that your son and his friends are on the level and won't try to cheat an old fellow like me. I'll have to be going now, but I'll be around about the same time to-morrow morning to get the stock quotations. Coming, Blackford?"

CHAPTER XI

A MOUNTAIN RADIO STATION

LEFT to themselves, the boys looked at one another.

"That's what I call quick work," remarked Joe. "I hate to let the old set go, but they say you should never mix sentiment with business."

"Maybe this will lessen your grief," said Bob. "Eighty divided by four makes twenty, or at least that's what they always taught us in school. Take these four five-dollar bills, Joe, and dry your tears with them."

"Oh, boy!" exclaimed Joe.

"Money, how welcome you are!" ejaculated Herb, as he pocketed his share. "What I can't do with twenty dollars!"

"That will buy exactly two thousand doughnuts," calculated Jimmy, a rapturous expression on his round countenance. "Hot doughnuts, crisp brown doughnuts, doughnuts with jelly in them, doughnuts——"

A human avalanche precipitated itself on the corpulent youngster, and he found himself writh-

ing on the floor with his three companions seated comfortably on different parts of his ample anatomy.

"Hey! Quit, quit!" stuttered Jimmy. "Get off me, you hobos! You'll have me flattened out like a dog that's just been run over by a steam roller."

"And serve you right, too," retorted Joe. "What do you mean by talking about doughnuts when it's almost dinner time, and we're starved to death, anyway. Besides, you know there isn't a place at Mountain Pass where we can buy them."

"Yes, and if I'd known that before I started, I would probably have stayed at home," retorted Jimmy. "Get off me, will you, before I throw you off?"

"We'll let you up, but I doubt if you should be trusted with all that money," returned Bob, grinning. "You'd better whack it up among us, Jimmy. You'll just buy a lot of junk with it and make yourself sick."

"Well, I've got a right to get sick if I want to," said his rotund friend, struggling to his feet. "If you get that twenty away from me, it will have to be over my dead body."

"It doesn't seem worth while to kill him for just twenty dollars," said Bob, pretending to consider. "That's just a little over six dollars apiece."

"No good," said Joe, decisively. "It would cost more than that to bury him."

"You're a cold-blooded set of bandits," complained Jimmy, in an aggrieved tone. "I'm glad I haven't got a hundred dollars with me. I'd be a mighty poor insurance risk then, I suppose."

"I wouldn't give a lead nickel for your chances," said Bob. "But don't let that worry you, Jimmy. You'll probably never have that much money all at one time as long as you live."

"I won't if I wait for you fellows to give it to me," admitted his friend. "But I'm going over to the hotel and see if dinner is served yet. I'm not going to be the last one in the dining room at every meal."

"When you get the hang of this place, you'll always be the first one," said Herb. "After a little while they'll make you up a bunk in a corner, and you can even sleep there."

"Oh, go chase yourself!" exclaimed Jimmy. "You never learned how to eat, Herb, and that's why you're such a human bean pole," and with this parting shot he slammed the door behind him before Herb could think of a suitable reply.

"He got you that time, Herb," said Bob, with a grin. "I guess we might as well all get ready for dinner. Dad says they hate to have people coming in late."

Every day after that Mr. Robins dropped in in

time to hear the market reports, sometimes alone, and at others accompanied by his partner, Mr. Blackford. The latter was not quite so enthusiastic as his colleague, but he was nevertheless greatly interested, and was always glad to don a head set and hear what was going on.

True to their agreement, the boys instructed the new owner of the set how to adjust it and get the best results. He always paid the closest attention to what they told him, and in a few days could pick up signals and tune the set fairly well.

"Not bad for an old fellow, eh?" he exclaimed delightedly one day, when he had accomplished the whole thing without any aid from the boys. "If Blackford and I sell out to your father, Bob, I'll have a little leisure time, and blame it all if I don't think I'll do some experimenting and possibly some building myself."

"You're pretty badly bitten by the radio bug," observed his partner.

"I won't try to deny it," said the other, emphatically. "The more I think about it, the more wonderful it seems. Besides, it's got a mighty practical side to it. I was holding on to some shares a few days ago until I learned by way of the radio that they were starting to fall. I sent a telegram to my brokers, they sold out for me just in the nick of time, and I made a profit on the deal instead of having to take a loss. The

bottom dropped clean out of the market that same afternoon, and if I'd been holding on to those shares, I would have gotten bumped good and hard."

The other nodded. "It's a good investment when you look at it that way," he admitted.

"Good investment is right," declared his partner. "I saved a lot more in that deal than the whole radio outfit cost me, and I still own the set."

"I wonder why the new government wireless station doesn't do something of the kind," remarked Mr. Blackford. "They might as well make themselves useful as well as ornamental."

"Government station!" exclaimed Bob and Joe at once. "Is there a government station at Mountain Pass?"

Mr. Blackford nodded. "I thought you fellows knew about it, or I'd have mentioned it before," he said. "It was just opened a few weeks ago, and I don't think they've got all their equipment in yet. There's been some delay in getting the stuff here, I understand."

"What does the government want of a wireless station away up here?" asked Bob.

"This is the highest point in all the surrounding country and makes an ideal lookout for forest fires," said his informant. "The station was supposed to be ready for use last summer, but, as I

say, was delayed a good deal. But we expect it to be of great service in the future. There have been some disastrous forest fires around here in the last few years, as you probably know."

"We ought to know it," remarked Joe. "The smoke has been so thick as far away as Clintonia sometimes that you could cut it with a hatchet. It's about time something was done to stop it."

Of course, once they heard about the government station, the boys could think of nothing else until they had visited it. Bob proposed that they go right after lunch, and this met with the enthusiastic approval of his friends. Poor Jimmy was so rushed by his eager friends that he was frustrated in his design of asking for a second helping of chocolate pudding, and was hurried away protesting vainly against such unseemly haste.

"What do you Indians think you're doing?" he grumbled. "Do you all want to die of indigestion? Don't you know you're supposed to rest after a meal and give your stomach a chance?"

"Oh, dry up," said Joe, heartlessly. "If you didn't eat so much you wouldn't want to lie around for two hours after every meal like a Brazilian anaconda. You know you didn't want another plate of that pudding, anyway."

"Didn't I!" said Jimmy, disconsolately. "That was about the best pudding I ever tasted, bar

none. You fellows are such radio bugs that you can't even pay proper attention to what you're eating."

"You give enough attention to that to make up for the whole gang," said Bob. "Stop your growling and step along lively, old timer."

Jimmy grumbled a little more in spite of this admonition, but regained his usual cheery mood when he saw the steel lattice-work towers with the familiar antenna sweeping in graceful spans between them, and forgot all about the missing plate of pudding.

The station was situated some distance from the Mountain Rest Hotel in a clearing cut out of the dense pine woods, and the boys ceased to wonder why they had not discovered it on some of their rambles. As they drew near they could see that everything was solidly and substantially built, as is usually the case with government work.

The station, besides the towers, comprised a large, comfortable building, which housed all the sending and receiving equipment, and a smaller building, in which the operators slept when off duty, and where spare equipment was stored.

The radio boys knocked at the door of the larger building, and after a short wait it was opened by a tall, rather frail looking young fellow, who eyed them inquiringly.

Bob explained that he and his friends were

radio fans, and were anxious to look over the station, if it would not cause too much inconvenience.

"Not a bit of it," said the young operator, heartily. "To tell you the truth, there is not much doing here at this time of year, and company is mighty welcome. Step in and I'll be glad to show you around the place."

CHAPTER XII

THE MARVELOUS SCIENCE

INSIDE of half an hour the boys were on a friendly footing with the young operator and felt as though they had known him a long time. He was only a few years older than themselves, and had been a full-fledged operator for about six months. The Mountain Pass station was his first assignment, and he was inordinately proud of the complicated apparatus that went to compose it.

"This is some little station that Uncle Sam has rigged up here, and while there are plenty of bigger ones, there are very few that are more complete and up to date. Look at this three unit generator set, for instance. Compact, neat, and efficient, as you can easily see. It doesn't take up much room, but it can do a whole lot."

"It does look as though it were built for business," admitted Bob. "I suppose that unit in the center is the driving motor, isn't it?"

"Right," said the other. "And the one nearest you is a two thousand volt generator for supply-

ing the plate circuit. The one at the other end is a double current generator. That supplies direct current at one hundred and twenty-five volts and four amps for the exciter circuit, and alternating current at eighty-eight volts and ten amps for feeding that twelve volt filament heating transformer that you see over there in the corner."

"Pretty neat, I'll say," remarked Joe.

"I think so," said the other, and continued to point out the salient and interesting features of the equipment. "Over here, you see, is our main instrument panel. These dials over here control the variable condensers, and the other ones control the variometers. But there!" he exclaimed, catching himself up short. "I suppose none of you ever heard of such things before, did you?"

The radio boys looked at each other, and could not help laughing.

"We've got a faint idea what they are, anyway," chuckled Bob. "We've made enough of them to be on speaking terms, I should say."

"Made them!" exclaimed the other, surprised in his turn.

"Sure thing," grinned Bob. "We've made crystal detector sets and vacuum tube sets, and——"

"And other sets that we never knew just how to describe," interrupted the irrepressible Herb, with a laugh.

"Yes, that kind too," admitted Bob, with a grin. "But, anyway, we've made enough to know the difference between a variometer and a condenser."

"Well, I didn't know I was talking to old hands at the game," said the operator. "I suppose I might have known that you wouldn't take that long walk out here through the snow unless you were pretty well interested in radio."

"Yes, we're dyed-in-the-wool fans," admitted Bob, and told the operator something of their radio work.

"I'm mighty glad to know that you fellows do understand the subject," said the operator, when Bob had finished. "I'm so enthusiastic about it myself, that it is a real pleasure to have somebody to talk to that knows what I'm talking about. So many of the people who come here seem to be natural born dumb-bells—at least, on the subject of radio."

"Such as you took us for at first, eh?" asked Jimmy, with a grin.

"I apologize for that," said the other, frankly. "Please don't hold it against me."

"Personally, I don't blame you a bit," said Bob. "We can't expect you to be a mind reader."

"Well, then, that's settled; so let's look at the rest of the station," said the operator, whose name was Bert Thompson. "This is our trans-

mitter panel over here. It is very compact, as you can see for yourselves."

He opened two doors at the front, one at the bottom, and raised the cover, thus exposing most of the interior mechanism to view.

"Here are all the fuse blocks down at the bottom, you see," Thompson continued. "The various switches are conveniently arranged where you can easily get at them while you are sitting in front of the panel. Then up here are the microphones, with their coils and wiring where you can easily get at them for inspection or repairs. Rather a neat lay-out, don't you think?"

"No doubt of it!" exclaimed Bob, admiringly. "We've never made a CW transmitting set yet, but we hope to some day. A set like this would cost a pile of money, even if you made it yourself."

"Rather so," admitted the young operator. "It takes a rich old fellow like Uncle Sam to pony up for a set like that."

"We're more interested in receiving sets just at present," said Joe. "Let's take a look at that end of the outfit."

"Anything you like," said Thompson, readily. "That panel is located on this side of the room."

"I suppose you use a regenerative circuit, don't you?" asked Bob.

"Oh, yes," answered the other. "That helps

out a lot in increasing the strength of the incoming sounds."

"I suppose you use a tickler coil in the plate circuit, don't you?" ventured Joe.

"No, in this set we use a variometer in the plate circuit instead," said Thompson.

"Speaking of regenerative circuits, have you heard about Armstrong's new invention?" asked Bob.

The operator shook his head. "Can't say that I have," he said. "It must be something very recent, isn't it?"

"Yes, I believe it is," said Bob. "I read about it the other day in one of the latest radio magazines."

"Do you remember how it worked?" asked Thompson, eagerly. "I wish you'd tell me about it, if you do."

"I'll do my best," promised Bob. "The main idea seems to be to make one tube do as much as three tubes did before. Armstrong found that the limit of amplification had been reached when the negative charge in the tube approaches the positive charge. By experimenting he found that it was possible to increase the negative charge temporarily, for something like one twenty-thousandth of a second, I think it was. This is far above the positive for that tiny fraction of a second, and yet the average negative charge is

lower. It is this increase that makes the enormous amplification possible, and lets the operator discard two vacuum tubes."

"Sounds good," said Thompson. "Do you suppose you could draw me a rough sketch of the circuit?"

"Let's have a pencil and some paper, and I'll make a try at it," said Bob. "I doped it out at the time, but likely I've forgotten it since then."

Nevertheless, with the friendly aid of the eraser on the end of the pencil, he sketched a circuit that the experienced professional had no difficulty in understanding.

"You see," explained Bob, "with this hook up you use the regular Armstrong regenerative circuit, with the second tube connected so that it acts as an automatic switch, cutting in or out a few turns of the secondary coil. The plate circuit of the second tube is connected to the plate of the detector tube through both capacity and inductance."

"I get you," nodded the operator. "According to your sketch the plate and grid of the second tube are coupled inductively, causing variation in the positive resistance of the tuned circuit."

"That's the idea exactly," agreed Bob. "You see, this is done by means of the oscillating tube, the grid circuit being connected through the tuned circuit of the amplifying tube."

"Say, that looks pretty good to me!" exclaimed Thompson. "I wonder how Armstrong ever came to dope that out. I've been trying to get something of the kind for a long time, but I never seemed to get quite the right combination."

"Well, better luck next time," said Bob, sympathetically. "There are a lot of people working at radio problems, and it seems to be a pretty close race between the inventors. Something new is being discovered almost every day."

"If you fellows are building sets, you're just as likely to make some important discovery as anybody else," said Thompson. "That super-regenerative circuit is a corker, though. I'm going to keep that sketch you made, if you don't mind, and see if I can make a small set along those lines. I have lots of spare time just at present."

"It will repay you for your trouble, all right," remarked Joe. "We're figuring on doing the same thing when we get back home."

Jimmy had tried faithfully to follow the technicalities of the recent conversation, but his was an easy going nature, disinclined to delve deeply into the intricate mysteries of science. Herbert was somewhat the same way, and they two wandered about the station, laughing and joking, while Bob and Joe and the young wireless man argued the merits of different equipments and hook-ups.

"Say!" exclaimed Jimmy, at length, "I hate to break up the party, but don't you think it's about time that we thought of getting back to the hotel? Remember we've got a long way to go, and it's four-thirty already."

"Gee!" said Bob, glancing in surprise at his watch. "I guess Jimmy is right for once in his life. We'll have to hustle along now, but we'll drop in here often while we are at Mountain Pass—unless you put up a 'no admittance' sign."

"No danger of that," laughed the other. "The oftener you come, the better I'll like it. This is a lonely place, as you can see for yourselves."

The radio boys shook hands with Bert Thompson, and after thanking him for the trouble he had taken to show them the station, they started back for the hotel at a brisk pace.

The days were growing very short, and it was after dark when they reached the hotel. Very warm and comfortable it looked as they approached it, windows lighted and throwing cheerful beams over the white snow outside. A red glow filled the windows of the living room, and the boys knew that a big wood fire was roaring and crackling in the big fireplace. As they drew close, a tempting aroma of cookery reached them, and caused them to hasten their steps.

They had barely time to get freshened up before the dinner bell rang, and in a short time they

were making havoc with as fine a meal as any of them ever tasted.

When they told about their visit to the radio station, Edna and Ruth Salper, the daughters of the Wall Street broker they had met in the snow-storm, were among the most interested of the listeners.

"We find it so dull over at our house we are glad to come over here for meals and to visit," said Ruth Salper.

"I suppose being in the woods in winter is rather dull," returned Joe, politely.

"Did you boys really know enough about radio to talk all afternoon with the man in charge of the government station?" inquired Edna, curiously.

"Why not?" asked Bob. "Don't you think radio is a broad enough subject to talk about for an entire afternoon?"

"Oh, I suppose it is," she admitted. "But why don't you share some of your fun with us?"

CHAPTER XIII

PRESSED INTO SERVICE

"JUST what do you mean?" asked Bob. "Do you want to talk radio with us all to-morrow afternoon?" he went on, with an irritating grin.

"No, of course I don't, stupid," she exclaimed. "But why can't you bring your old wireless things into the hotel parlor and let us all hear some music? We'd be ever so grateful if you would."

The radio boys looked doubtfully at each other.

"We'd do it, fast enough," said Bob. "But we didn't bring a loud speaker with us, and without that nobody could hear much unless he had a set of telephone receivers."

"Oh, dear!" she exclaimed. "I just knew you'd make some excuse or other."

"A loud speaker is something that looks like an old-fashioned phonograph horn, isn't it?" asked Ruth, the younger sister, before any of the radio boys could refute the older girl's accusation.

"Well, yes, it looks like that; but the details are different," replied Bob.

"Yes, but if you had a phonograph horn, couldn't you fix it up so that the music would be loud enough for us all to hear it?" persisted Ruth.

"Good for you, Ruth!" exclaimed her sister. "I know what you mean. You're thinking of that old phonograph they used to have in this hotel, before they got the big new cabinet machine."

"If Edna and I get that horn for you, it will be easy for such experts as you boys are to make a—a what-you-may-call-it—loud speaker—out of it, won't it?" asked Ruth, demurely.

"I think they're kidding us now, Bob," said Joe, grinning. "When a girl tells you you're an expert, you can bet she's figuring to wish something on you."

"Yes, but it's so unusual that we ought to do something to encourage it," laughed Bob. "Let's call their bluff. Probably they'll never be able to find a horn, anyway."

"Don't count too much on that," said Edna, with a dangerous smile. "We almost always get what we ask for."

"Yes, and you are everlastingly asking for something, it seems to me," grumbled her father, who had joined the little group at that moment.

"Now, Daddy, you know you love to give us things," chided Ruth. "If we suddenly had every-

thing we wanted, you'd be dreadfully disappointed."

"There's no danger of that happening," said her father, a smile softening his grim face. "But what is it you're after just at present?"

"We want that big phonograph horn they used to have here in the hotel," said Edna, with a provoking side glance at the radio boys. "Will you ask the manager to hunt it up and lend it to us?"

"I'll see what I can do about it," promised Mr. Salper. "I remember the horn you mean, but it was probably thrown away long ago."

The radio boys rather wished that this might prove to be the case, but they were not destined to get off so easily. The first thing they saw when they entered the dining room the next morning was a large wooden horn, of a style in universal use in the early years of the phonograph, standing prominently near their table.

"There, now!" exclaimed Jimmy, in a low voice. "You see what you've let us in for, Bob. Why didn't you tell them that we didn't have time to waste building a loud speaker, and settle the thing right then and there."

"That's easier said than done," answered Bob. "Why don't you go over to the Salper's house and tell the girls that?"

"Yes, go right over and be rough with them," advised Joe. "Tell them that you're not afraid

of girls, and they can't put anything over on you."

"Aw, I would have, last night; but it's too late now," said Jimmy, lamely.

"Yes, you would!" jeered Herb. "After all, it won't be so much work. You're an expert carpenter, Jimmy, and can make a bang-up job of it."

"That's always the way," complained Jimmy, heaving a dismal sigh. "You fellows think up a good, hard job, and then I do the work. I've never known it to fail yet."

"Buck up, Doughnuts," said Bob. "Think of how the girls will thank you for it. You'll be the most popular fellow in the hotel."

"Like fun I will!" returned the fat boy. "But I'm not going to let it interfere with my appetite. I can see where I've got a hard day ahead of me."

It proved to be a busy morning for all the radio boys. Immediately after breakfast they fell to work on the horn, and after some three hours of steady labor they had constructed a passable loud-speaking horn, using one telephone receiver clamped securely at the narrow end. They mounted the whole thing on a solid wooden pedestal, leaving two substantial shelves at the back to hold their radio apparatus.

It did not take them long to mount the receiving outfit in a neat manner, and when this was

done they all drew a long breath and sat down to admire the result of their labors. While still engaged in this gratifying occupation, Edna and Ruth Salper entered.

"Oh!" exclaimed the former, with a gesture of delight, "doesn't it look simply beautiful? I never thought you boys could make it so quickly."

"You've got Jimmy to thank for that," said Bob. "I never saw him work so hard in his life before. It was easy to see that he was thinking of you and Ruth all the time, from the way he put his heart into it."

"I didn't anything of the kind," said the embarrassed Jimmy. "I never thought of them once, even."

"What a dreadful thing to say," laughed Ruth. "I didn't know you hated girls, Jimmy."

"Who said I hated 'em?" demanded Jimmy, getting as red as a beet. "I—I——"

"Love them," Joe finished for him. "Is that what you are trying to say, Jimmy?"

"Say, who asked you to butt in?" inquired Jimmy, desperately. "Everybody is trying to tell me what I mean, until I don't know which is right myself."

"Never mind," said Edna, coming to the rescue of the floundering youth. "We are grateful to you for working so hard for us, anyway."

"Oh, that's all right," mumbled Jimmy. "If

it works all right, we won't worry about the labor we put into it."

"But don't you expect it to work?" asked Edna, teasingly.

"Sure it will work," asserted Bob, before Jimmy could involve himself again. "That is, you'll hear music, all right, but it probably won't be very loud, even with the help of the horn. We're a long way from the broadcasting station, you know. If we were within ten or fifteen miles of it, I'd say surely that it would be a success."

"I'll go and get the loop aerial, Bob, and we can test it right now," suggested Joe. "What do you think?"

Bob nodded, and Joe left the room, returning a few minutes later with the loop. This was soon connected with the set, and then Bob began tuning for signals.

"Mercy! what was that?" exclaimed Edna, while Ruth gave a little scream.

From the horn came an ear-piercing howl, followed by whistles and weird unearthly shrieks. But the boys only laughed heartily at the girls.

"That's nothing but old man static," said Bob. "We'll soon get him off the wires."

"Does he live near here?" asked Ruth, innocently.

"Wow!" shouted Herb, and the boys could not help laughing, although they stopped as soon as

they saw the mystified and somewhat hurt expression in the girl's eyes.

"That was just Bob's slangy way of talking," explained Joe, after he was sure that he had regained control of his features. "Static is the electricity that is always in the air, and gives us radio fans a good deal of trouble."

"Oh, I see," said Ruth, and she was a good enough sport to laugh at her own mistake.

Meantime Bob had finally got the set tuned to the proper wave length, and the little group were all delighted with the clarity and volume of the resultant sounds. They were not nearly as loud as an ordinary phonograph, but were sufficient to be heard distinctly in a fairly large room.

"It's too bad we only have a one-stage amplifier," said Bob. "If we only had another transformer and vacuum tube, we'd have a loud speaker that you could hear all over the hotel."

"I think this one is plenty good enough," asserted Edna.

Both she and her sister were as excited as children with a new toy, and they were both delighted with the music.

"You boys will have to bring this wonderful thing into the parlor to-night, and let everybody hear it," coaxed Edna. "I know they will all be tickled to death to hear a concert in this new way."

"They might not be as enthusiastic as you think," said Bob, doubtfully. "Maybe they'd rather just talk, and wouldn't thank us for interrupting them."

"What an idea!" exclaimed Ruth. "Just try it once, just to please us, and you'll soon find out whether they like it or not."

"Well, if it's to please you, we'll certainly do that thing!" Bob gallantly remarked, and was rewarded by a friendly smile.

"Edna and I will speak to the manager about it this afternoon, and I know it will be all right," she said. "We'll tell you what he says at supper time."

The radio boys, although they were radio enthusiasts themselves, did not actually realize how deeply interested people had become in this new and wonderful science. They were somewhat surprised, therefore, when the manager sought them out that afternoon and told them that he would be more than delighted to have them give a radio concert that evening.

CHAPTER XIV

SCORING A TRIUMPH

WHEN he had gone the boys grinned at one another.

"We're getting to be popular around this place," remarked Bob.

"We sha'n't be quite so popular to-morrow, if the concert broadcasted to-night isn't a good one," said Joe.

"I only wish we could get that loudspeaker to speak just a bit louder," said Herb. "It's only fair now, and those people will be expecting a lot, I suppose."

"I was thinking the same thing," remarked Bob. "And if we're willing to pitch in this afternoon, we can improve the strength of our set a lot."

The others looked incredulously at him.

"Explain," said Joe. "You've got us guessing, Bob."

"The way we've got our set hooked up now, we're using a loop antenna, aren't we? Well,"

as the others nodded assent, "why not unwind the loop and string a double aerial on the roof? That would give us a lot more power, you know."

"Right you are!" exclaimed Joe. "That should make a lot of difference."

"But if we do that, we'll have to have a ground, which isn't necessary with the loop antenna," objected Herb.

"That's true enough," agreed Bob. "But that's easy, after all. We can hook our ground wire to one of the steam radiators."

"Trust Bob to think of everything!" ejaculated Jimmy.

"Bob is thinking that we'd better get busy, then," said that individual. "Heave yourself off that nice soft couch, Jimmy, and get your hat and overcoat on."

Jimmy emitted a dismal groan.

"Have a heart, Bob," he complained. "You know I worked so hard this morning that I'm all in."

"All right, then, you stay there; but we'll tell Edna and Ruth that you refused to help," said Joe, cruelly.

This threat had its effect, and Jimmy struggled to his feet and had his outer clothing on almost as soon as the others. It was a beautiful day outside, and after they once got warmed up, they thoroughly enjoyed the work of stringing the

aerial on the roof. They brought the leading-in wire to one of the windows of the hotel parlor. It was not necessary to insulate this with anything heavier than friction tape, as this was to be only a temporary installation. Before dark they had everything ready, and then they went inside, moved their receiving set into the parlor, and connected it up to the leading-in wire. Following Bob's suggestion, they attached a ground wire to a radiator, and found that everything worked perfectly. As they had anticipated, the signals were considerably louder, and the old phonograph horn filled the big room with a satisfying volume of sound.

During dinner the boys were so excited that they could hardly eat, and immediately afterward they hurried into the parlor. The guests had been notified of the impending concert, and soon almost everybody in the hotel had crowded into the room.

The hotel manager made a little speech introducing the boys to those who had not already become acquainted with them, and mentioning the concert that was to come. Then every one waited expectantly for the promised entertainment.

It proved unnecessary to do much tuning, as the adjustment they had secured that afternoon proved to be very nearly correct still.

When the first clear notes floated into the room many of the audience straightened up in their chairs, while looks of astonishment passed over their features. At first they were too engrossed with the novelty of the thing to pay much attention to the music, but gradually the golden notes wove their magic net and held them all enthralled. The night was an ideal one for radiophony, cold and still, with hardly any static to annoy. One selection after another came in clear and distinct, and after each one the audience applauded instinctively, hardly conscious of the fact that upward of one hundred miles of bleak and snow-covered mountains and valleys lay between them and the performers.

At length, to everybody's regret, the last number was played, and the receiving set was silent. Not so the audience, however, who overwhelmed the boys with thanks, and made them promise to entertain them in a similar manner on other evenings.

After most of the audience had drifted out the Salper girls thanked the boys prettily for all they had done, and they felt more than repaid for the hard work of the day, even Jimmy admitting afterward that "it was worth it."

The next day the boys were eager to see Bert Thompson, the radio man, and tell him about their successful experiment, so they set out for

the government station soon after breakfast. It had snowed in the early morning, but had now stopped, and the air was cold and bracing.

The four lads relieved the monotony of the long walk with more than one impromptu exchange of snowballs. It seemed that they had hardly started before they had traversed the miles of difficult going and found themselves in the snug interior of the wireless house.

As they were approaching it, they were astonished to see Mr. Salper emerge, a heavy frown on his usually none-too-cheerful countenance. He only nodded to the radio boys in passing, and hurried away through the snow at a pace of which they would never have believed him capable.

When they entered the station they found Bert Thompson excited and angry. When they opened the door he started up, but when he saw who his visitors were, sank back in his chair.

"I'm glad it's you fellows!" he exclaimed. "I thought it was that Wall Street man coming back. I'm not sure but I'll throw him out if he does. I'd like to, anyhow."

"You are all up in the air," said Bob. "Did you have an argument with Mr. Salper?"

"Well, he did most of the arguing," said the other, with a faint smile. "He's so blamed used to having his own way that if any one doesn't do just as he wants, he gets mad.

"I suppose I should make allowances for him, because he has plenty to worry him," went on Thompson. "Some of those Wall Street manipulators are a ruthless bunch, and when they aren't busy taking money from an innocent public, they stage some battles between each other. Mr. Salper has an idea that a bunch of them are trying to swing the market against him while he's up here, and he seems to think that this is a public radio station, with nothing to do but send and receive messages for him all day. I'm working for Uncle Sam, not for him."

"Oh, well, don't let him get you all stirred up, anyway," said Bob. "He doesn't mean half of what he says. He was real decent last night while we were giving our concert."

"What do you mean, concert?" asked the wireless man. "Are you in the entertainment game now?"

"Something like that," answered Bob, grinning, and then he told the operator about the concert of the previous evening.

"That's fine," said Thompson heartily, when he had finished. "That was a good idea, to use a regular aerial instead of the loop. It certainly catches a lot more."

"Yes, but the loop is mighty handy, just the same," remarked Joe. "Especially in a portable set. You can set it up in no time."

"Oh, it's handy, there's no doubt of that," admitted the young wireless man. "I wish I had been there for the concert. I heard most of it here, but it must have been fun to watch the faces of the audience when you started in."

"It was," laughed Herb. "I think that some of them imagined we had a phonograph hidden somewhere because after the concert was over a number of them looked all around the set as though they were hunting for something suspicious."

"Likely enough," agreed Thompson. "Some people are mighty hard to convince."

After some further conversation the boys took their leave, promising to come again for a longer visit. On the way back the chief topic of discussion was Mr. Salper, and the boys wondered more than once just what the nature of the trouble was that caused him to haunt the wireless station and besiege the operator with a flood of messages.

CHAPTER XV

THE SNOWSLIDE

"WELL," said Herb, philosophically, "'it is an ill wind that blows nobody any good.'"

Bob, who had been shaking a tree for nuts and had shaken down more snow than anything else, looked at Herb inquiringly.

"Now what's the poor nut raving about?" he asked slangily of Jimmy and Joe, who were also engaged in nut gathering.

"I was just thinking," said Herb, with an attempt at dignity, "how sorry I am for all those poor sick people in Clintonia."

"Oh, yes, you were," scoffed Jimmy, who was eating more nuts than he saved. "You were thinking how lucky we are to be here picking nuts in the woods instead of slaving away in Clintonia High."

"Gee, that fellow must be a mind reader!" exclaimed Herb, grinning, and Bob, coming near, made a pass at him.

"Say, get busy, old bluffer," he said. "You're

getting slower than Doughnuts here. You haven't got half the nuts that I have."

"But I'm having twice as much fun," countered Herb, unmoved. "A fellow can't work all the time."

"I wish I knew what was worrying Mr. Salper," said Joe, suddenly. "I wonder if that Wall Street bunch is really out after his money."

"Gee, he sure does know how to change the subject," murmured Herb, and Bob threw a nut at him, which he successfully ducked.

"He seemed rather cut up about it, anyway," said Bob, in answer to Joe.

"I wouldn't trust those Wall Street sharpers out of my sight myself," added Jimmy solemnly.

"Gee, listen to the financier," gibed Herb. "He's lost so many millions in Wall Street himself."

"Not yet," said Jimmy, plaintively. "But wait, my boy, my life is all before me."

"Say," cried Joe, "if you two fellows don't look out I'll put you in my pocket with the other nuts."

"Mr. Salper seems kind of a nut himself," said Joe, continuing with his own reflections. "He seems to have a grouch on everything and everybody."

"No wonder, with all the worries he's got,"

said Jimmy, adding dolefully: "You see the penalties of extreme wealth."

"One thing you'll never have to worry about," said Herb, and Jimmy grinned good-naturedly.

"I'd rather have my sweet disposition," he sighed, "than all of Salper's wealth."

"I don't see why you think he's so wealthy," Bob objected. "Everybody who trades in Wall Street isn't a millionaire, you know."

"Say, wait a minute!" cried Bob suddenly, with an imperative wave of his hand. "Did you hear anything?"

They listened for a moment in breathless silence and it came again, the call that Bob's sharp ears had first detected. In the distance it was, surely, but a distinct cry for help, nevertheless.

"Come on, fellows! We're needed!" cried Bob, and, dropping his bag of nuts in the snow, he started off at a swift pace in the direction of the sound.

The rest of the radio boys needed no second invitation. They started after Bob, pushing swiftly through the deep snow.

But as the seconds passed and they heard no further outcry, they thought that they must have been mistaken or that they had started in the wrong direction.

However, as they stopped to consider what to

do, the cries began again, louder this time, a fact which told them they had been on the right track all along.

They hurried on again, sometimes plunging into snowdrifts that reached nearly to their waists, but keeping doggedly on to the rescue.

It was enough for the radio boys that some one was in trouble. Even roly-poly Jimmy, puffing painfully, but running gallantly along in the rear, had but one thought in his head, and that to help whoever needed help.

As they came nearer the cries became louder, and they thought they could distinguish three voices, and one seemed to be that of a woman.

Another minute they came upon a cleared space and stopped still for a moment to stare at the amazing scene which met their eyes.

A woman stood, nearly knee deep in snow, waving her arms wildly, and even in that moment of astonishment they recognized her as Mrs. Salper. She was gesticulating toward something in front of her and calling urgently to the boys to hurry.

Then the lads saw the cause of her distress. At the foot of a steep rise of ground, almost a small hill, was all that was to be seen of two girls. These latter had their heads above the snow that enveloped them and they were trying desperately

to work their arms free of the icy blanket. From their expressions and from their wild cries for help it could be seen they were panic-stricken.

"A snowslide!" Joe, who was standing close to Bob, heard him mutter. "Those girls had a narrow escape to keep from being buried entirely!"

The next moment he was dashing off in the direction of the two prisoners, shouting encouragement to Mrs. Salper. The others were close at his heels.

"We'll get you out all right," he called to the frightened girls, who had stopped their struggling and were looking at him hopefully. "Just keep still for a moment and save your breath. We'll have you out of there in a jiffy.

"Dig, fellows, for all you're worth," he added to the boys, who, as usual, looked to him for directions. "These girls must be pretty cold by this time."

For answer the boys did dig manfully, the imprisoned girls helping them as much as they could with their numb fingers, and before many minutes they had the snow cleared away sufficiently to be able to struggle through it to a spot where it was not so deep. The girls were, of course, Edna and Ruth Salper, the pretty daughters of the Wall Street broker.

Edna and Ruth were trembling with cold and with the shock of their recent accident, and Mrs.

Salper ran to them, putting an arm about each of them protectingly and pouring out thanks to the embarrassed boys.

"That's all right," said Bob, modestly. "We couldn't very well have done anything else, you know. I hope," he added with a glance at the shivering girls, "that the girls won't take cold."

"They will if I don't get them home quickly," said Mrs. Salper, adding, with a worried frown: "I wish we hadn't come so far from the house."

It was then that Joe broke in.

"I tell you what," he said, eagerly. "It isn't far to Mountain Rest——"

"And there's sure to be a fire in the grate up there," Bob finished for him.

"And it's a fire that will warm you up in a jiffy," added Herb with his most friendly smile.

"If we can only make it," sighed Mrs. Salper.

The radio boys knew of a short cut from this spot to Mountain Rest and along this they led the others as swiftly as they were able to travel. And on the way they learned how it was that the girls had happened to be in such a predicament.

"I shouldn't have let them do it." It was Mrs. Salper who told the story. The two girls were still too shaken from their adventure to say anything. All they could think of was the comforting shelter of a room and an open grate fire.

"They wanted to climb up that little hill to

see what was on the other side of it," the lady went on to explain. "I didn't want them to, for I saw that the snow was deep. But they were in wild spirits, wouldn't listen to me, said I didn't need to come if I didn't want to—which I didn't!—and off they went.

"When they had nearly reached the top Edna started to fall——"

"No, it was Ruth, Mother," corrected the girl, showing the first sign of returning interest.

"Well, it doesn't matter," said Mrs. Salper, with a sigh. "The result was the same. One of them clutched at the other and they both toppled down the hill. Their fall must have loosened a mass of the drifted snow and it came down on top of them. Heavens!" she shuddered at the memory. "It seemed as if the whole mountain side were falling on top of them! I thought they would be completely buried!"

"Well, we were, almost," said Ruth, chafing her cold hands to bring the circulation back into them. "Anyway," she added with a stiff smile, "I feel almost as frozen as if I had been!"

CHAPTER XVI

THE MODERN MIRACLE

"I BET you're cold," said Bob, sympathetically. "Never mind, we'll have you warmed up in a jiffy now."

As a matter of fact, the big hotel was even then looming before them, and in a moment more they entered its doors, to find to their delight that a roaring fire was burning in the grate of the big living room.

The two girls rushed to it joyfully, holding out their chilled hands to the blaze, snuggling to its warmth like two half-frozen kittens.

They happened to have the big room all to themselves at that moment, and, after having drawn chairs up to the fire for Mrs. Salper and the girls, the boys excused themselves and hurried back to the spot where they had dropped their bags of nuts when the cry for help had interrupted them in their occupation.

"Never do to lose the fruits of our labor," said Herb, grinning, as he picked up his own particular bag.

The other boys did likewise, and they were soon hurrying back to the hotel again, talking excitedly about the rescue of the Salper girls.

"It's mighty lucky we happened to be near enough to hear the cries for help," said Joe, soberly. "It would have been pretty hard for them to have forced their way through those drifts alone, half numbed as they were."

"Yes," agreed Bob. "It's pretty nice to think of them warm and snug before the fire just now."

"Queer," observed Jimmy as they neared the house, "that we should have been talking about them just at the time the thing happened."

"Queer," said Herb patronizingly, "but not half so queer, Doughnuts, as the modern miracles that happen every day——"

"Take radio, for instance," finished Bob, and they entered the hotel laughing.

They found the two girls recovered from their fright and quite a good deal happier than they had been a few minutes before. They regarded the radio boys with interest, and it was clear that the girls and Mrs. Salper had been talking about them during their absence.

"You're often called the 'radio boys,' aren't you?" challenged Edna, as the boys drew chairs up to the fire.

"Why, I guess so," said Bob, with a smile. "Lots of folks call us that."

"Dad was up at the radio station the other day and the operator there was enthusiastic about you," said Ruth Salper, in her direct way. "Said that if you kept on the way you were going, you would soon know more about radio than he does himself."

"That's mighty nice of him, but I'm afraid he was boosting us too high," replied Bob, trying hard not to show how pleased he was.

"That fellow at the station has forgotten more about radio than we ever knew," added Joe modestly, but in his heart he was as pleased at the praise as Bob was. It is always nice to receive commendation from some one who is an authority.

"You're very modest," teased Edna gaily. "But when dad says anything nice about anybody he generally means it. He doesn't say nice things very often——" She caught a glance of reproof from her mother and bit her lip penitently.

"You musn't say unkind things about your father, Edna," said Mrs. Salper, gently. "You know he is worn to death with business worries. If we could once succeed in making him forget his responsibilities, he would be as jolly and fun-loving as he used to be."

"Yes, dad used to be no end of fun," said Ruth, adding, with a fierce little frown and a clenching of her fists; "I just wish I could get hold of

whoever's worrying him so. I'd give them something to worry about for a change."

Then, seeming to realize that the boys might not be interested in her personal affairs—though as a matter of fact they were interested, extremely so—the girl tactfully turned the conversation to something which she thought might interest them.

"Could we see your radio set?" she asked, impulsively. "We'd just love to have you tell us about it. As much as we could understand," she added, with a smile for the boys.

Mrs. Salper protested feebly, but so eager were the boys to show off their set to the girl radio fans that her opposition was overcome almost at once.

Then followed a happy hour during which the radio boys talked learnedly of condensers and amplifiers and different kinds of receivers until the admiration of the girls mounted almost to awe.

"My, but it sounds worse than Greek!" cried Edna Salper once, as she bent absorbedly over the apparatus that worked such miracles and bore such high-sounding names. "This is the tuning apparatus, isn't it?" she asked, gingerly touching the wire coil. "It seems almost impossible that you can tune to any wave length with this thing, just as the piano tuner can tune the wires of his instrument to the proper sound vibration."

"It—the whole thing—seems impossible," added Ruth, while Mrs. Salper found herself quite as interested as her daughters.

"Yes, that's the way it seemed to us at first," agreed Bob, his eyes shining. "When Doctor Dale told us we could make a set for ourselves we could hardly believe him. But it didn't seem a bit hard once we got started and learned the hang of it."

"You mean to say that you made this set yourselves?" asked Mrs. Salper, with interest.

"Oh, this is nothing. We've made lots of 'em," said Jimmy proudly, at which Herb promptly kicked him under the table. The injured Jimmy glared at his assailant, but the others were too much interested in the subject to notice him.

"You see this is a comparatively small set," Bob explained.

"But we're working on a powerful apparatus now," broke in Joe eagerly. "And when we have that in working shape we'll be able to send as well as receive."

"Well, I think you're just as smart as father said you were," said Ruth, and at this candid compliment the confused boys thought it time to change the subject.

"How about listening in a while?" suggested Bob, struck by a sudden inspiration. "We ought

to be just about in time to catch the afternoon concert—if there is one. Would you like to find out?"

"Would we?" cried Edna, enthusiastically. "Indeed we would!"

"Just try us," added Ruth happily.

So the boys showed them how to fit the headphones, not using the loud-speaker they had made from the phonograph horn, and adjusted the tuning apparatus to the proper wave length, and the girls answered to the thrill of catching music magically from the ether just as the boys had done on that never-to-be-forgotten evening when their first concert had reached them over the wires of their first receiving set. Crude it seemed to them now in the light of later improvements, but an instrument of magic it had been to them that night.

No wonder that the boys felt a warm and real friendship for the Salper girls—and Mrs. Salper, too—a friendship that would have been surprising, considering the shortness of their acquaintance, had it not been that they were all radio fans, dyed in the wool.

So quickly did the time fly that Mrs. Salper was amazed and apologetic when she found how long they had lingered.

"We must hurry!" she exclaimed, starting toward the door, the girls reluctantly following.

"Your father will surely think we are all lost in a snowdrift."

"Which two of us came very near being," added Edna, with a laugh.

"Don't joke about it," said Ruth, with a shiver. "I must say being buried in a snowdrift wasn't very pleasant—while it lasted."

The radio boys insisted upon accompanying the Salpers home, explaining that they could show them the shortest path. Gaily they started out and before they had reached the Salper place the friendship which had begun the evening of the concert with their mutual interest in radio, became steadily stronger.

It was plain that, besides being grateful to them for having come to the help of the girls, Mrs. Salper liked the boys for their own sakes.

When they reached the house she begged them to come in with her so that Mr. Salper might have the opportunity of thanking them for their kindness.

The boys skillfully avoided accepting this invitation by pointing out that it was getting late and the path would be hard to find in the dusk.

"Thanks ever so much for everything," Ruth Salper called after them as they started off, and Edna added:

"We're going to frighten dad into getting us a radio set by threatening to make one ourselves!"

"I shouldn't wonder if they could make a set, at that," said Bob thoughtfully, as they tramped on alone. "They're smart enough."

"For girls," added Herb, condescendingly.

Whereupon Jimmy turned and eyed him scornfully.

"Say, where do you get that stuff?" he jeered. "If those girls couldn't make a better radio set than you, I'd sure feel sorry for them."

"Ha! I'll wash your face for saying that," was the quick answer, and the next instant Jimmy felt some snow on his ear. Then began a snow battle between all the boys which lasted until they reached the hotel.

CHAPTER XVII

THRASHING A BULLY

AFTER that the boys saw a good deal of Edna and Ruth Salper. The latter were thoroughly good sports and entered into the fun of the moment with such enthusiasm that the radio boys declared they were lots more fun than a good many of the fellows they knew.

They went nutting together, tramped through the woods, read together the latest discoveries in the radio field, until the girls became almost as great enthusiasts as the boys.

The boys were often asked to visit the Salper home, but it was seldom that they took advantage of these invitations.

"It would be pleasant enough," Herb declared, "if only grouchy Mr. Salper were not always around to put a damper on the sport."

As a matter of fact, on the rare occasions when they happened to meet, Mr. Salper hardly uttered a word, but it was this very silence of his that made the boys uneasy.

"I feel sometimes," Jimmy remarked, "as if I'd like to put a tack on his chair, just to see if he'd say 'ouch' when it stuck into him."

"He'd probably say a sight worse than that," Bob replied, with a laugh.

However, they were having too good a time to allow Mr. Salper and his grouches to interfere much with them.

They became familiar figures at the sending and receiving station, and the operator always received them cordially. They often had long and interesting discussions which were not only delightful to the boys but extremely helpful as well.

"It seems," said Jimmy, with a grin, "as if all the radio inventors were running a race with each other to see who can get the greatest number of inventions on the market in the shortest space of time."

"You said something that time, boy," the operator replied ruefully. "The smart fellows are keeping us dubs on the jump trying to catch up with them. Not that I intend to put you in the 'dub' class with myself," he added, with a grin.

"I only wish we knew half as much about the game as you do," Bob returned heartily. "I think we'd be mighty well satisfied."

One day when the radio boys had left Edna and Ruth Salper and were tramping through the woods alone, they spoke of the operator admiringly.

"He sure does know a lot about radio," said Joe. "He must stay up all night studying."

"Guess that's what's the matter with him," remarked Bob, soberly. "He spends too much of his time indoors, boning. He should get out in the open more."

"Looks as if a little fresh air might tone him up some," Herb admitted. "He looks as if a breath of air might blow him away."

"If I looked as thin as he does, I'd go see a doctor," said Jimmy emphatically.

It was a fact that the operator at the station, while looking far from strong when the boys had first seen him, had grown thinner and thinner and paler and paler until now he seemed to be positively going into a decline.

Because they had a sincere regard for Bert Thompson, the boys had tried to lure him out into the open, but he had been proof against all their blandishments. And after a while the boys had given up trying.

"If he wants to kill himself," Bob had grumbled, "I suppose we'll have to let him have his own way about it."

And now at this particular time when the boys were at peace with the world, something suddenly happened that gave them a rude jolt.

Talking happily of improvements they expected to apply to their new radio outfit, they came suddenly upon—Buck Looker and his crowd.

To say they were surprised would not have half expressed it. They were dumbfounded and mad—clear through. So here were these rascals, turning up as they always did, just in time to spoil the fun.

That Buck and his cronies had been talking about them was evident from the fact that at the appearance of the radio boys they stopped short in what they were saying and looked sullenly abashed. And from their confusion Bob guessed that the meeting was as much a surprise to the "gang" as it was to themselves.

The boys would have gone on without speaking, hoping to avoid trouble if it was possible, but Buck hailed them boisterously.

"Say, what are you guys doing here?" he asked, sneeringly, thrusting himself almost directly in front of Bob, so that the latter would be forced to step aside in order to pass him.

"That's what I'd like to ask you," returned Bob, feeling himself grow hot all over. "Get out of my way, Buck. You're cramping the scenery."

"Aw, what's your awful rush?" asked Buck,

refusing to move, while Carl Lutz and Terry Mooney sidled over to the bully, keeping a wary eye on Bob's right fist, nevertheless.

"Say, get out of here, Buck Looker, and get quick!" It was Joe who spoke this time, and any one not as stupid as Buck Looker would have known it was time to do as he was told.

But because of the fire that had burned to the ground his father's disreputable cottage in the woods and which he and his followers had blamed upon the radio boys, Buck Looker thought himself safe in taunting the latter as much as he wished. He assumed that they would not dare resent anything he said or did, for fear he would make public the matter of the fire and accuse them openly.

It was a chance of a lifetime for Buck—or so he thought—and he was determined not to overlook it. So his manner became more insulting than ever and his face took on a wider grin as his glance shifted from Bob to Joe.

"So you're in a hurry, too, are you?" he sneered. "Going to set some more houses on fire, eh?"

He turned to his cronies with a grin and they piped up together as if by a prearranged signal:

"Firebrands!"

This undeserved insult was more than the radio

boys could stand, and all stepped forward with clenched fists.

"You take that back, Buck Looker!" cried Joe, with flashing eyes.

"Take back nothing!" answered the bully.

"Yes, you will!" broke in Bob, and caught Buck by the arm.

At once the bully aimed a savage blow at Bob's head. But the latter ducked, and an instant later his clenched fist landed upon Buck's chin with such weight that the bully was sent over backward into the snow.

At the instant when Buck made his attack on Bob, Terry Mooney tried to hit Joe with a stick he carried. Joe promptly caught hold of the stick, and, putting out his foot, sent Terry backward into a snowdrift. Seeing this, Carl Lutz started to run away, but both Herb and Jimmy went after him and knocked him flat.

"You let me alone! I didn't do anything!" blubbered Carl, who was a thorough coward.

"You can't call me a firebrand," answered Herb, and while fat Jimmy sat on the luckless Carl, Herb rammed some snow into his ear and down his neck.

While this was going on both Buck and Terry had scrambled to their feet, and then began a fierce fight between that pair and Bob and Joe. Blows were freely exchanged, but soon the radio

boys had the better of it, and when Terry's lip was bleeding and swelling rapidly, and Buck had received a crack in the left eye and it was also swelling, all three of the cronies were only too glad to back away.

"Have you had enough?" demanded Bob, pantingly.

"If you haven't, we'll give you some more," added Joe.

"You just wait! We'll get square with you some other time," muttered Buck. And thereupon he and his cronies lost no time in sneaking away into the woods.

"Of all the mean fellows that ever lived!" cried Herb.

"I guess they'll leave us alone—for a while, anyway," came from Joe, as he felt of his shoulder where he had received a blow.

"I wonder what those fellows are doing around here, anyway," said Bob thoughtfully. "Do you suppose they're putting up at the Mountain Rest Hotel, too?"

"More than likely," answered Joe, gloomily. "Perhaps they've been driven out of Clintonia, too, on account of the epidemic. I heard quite a number of the other young folks were getting out. The whole town is pretty well scared."

"They are sure trying their best to make trouble for us," added Jimmy.

"That fire in the woods was just nuts for them," said Bob, with a frown. "They've been trying for a long time to get something on us, and now they think they've got it. They think we're afraid to beat 'em up now as they deserve, for fear they'll tell everybody we set that old shack on fire."

"It was a funny thing," remarked Joe, musingly, "how that fire started, anyway."

"Oh, what's the use of worrying?" added Herb, carelessly. "I reckon the memory of that licking will keep Buck quiet for a while. Say, that was a fine piece of work you did, Bob! The memory lingers."

Bob grinned.

"How about yourselves?" he asked, adding, with a gleam in his eyes: "I didn't notice Terry Mooney and Carl Lutz looking very happy!"

CHAPTER XVIII

A NEST OF CONSPIRATORS

THE radio boys saw Buck Looker often—all too often—in the days that followed. As the boys had feared, Buck and his crowd were staying at the Mountain Rest Hotel, and it was almost impossible to help encountering them.

Several times there were arguments which almost resulted in blows, but Buck always managed to sneak off at the critical moment, leaving the boys to fume helplessly.

"Wish we could find out how that shack of theirs caught fire," Joe grumbled on one of these occasions. "Then we could stop their mouths on that firebrand question once and for all."

"Wouldn't make any difference," remarked Herb gloomily. "If they couldn't make trouble for us on that score, they'd think up something else."

But about this time something happened that took the minds of the radio boys from Buck Looker and his trouble making.

One day, as they were tramping through the woods in the still deep snow, they came upon a little decrepit-looking one-room shack, standing dejectedly within a circle of skeleton trees.

They had wandered further than usual from camp in exploring the surrounding country and had come upon the tiny cabin unexpectedly. Jimmy was about to utter a gleeful shout at sight of the interesting-looking place when Bob clapped a warning hand over his mouth.

"Keep still," he whispered sharply. "I hear voices in there."

"Weil, what if you do?" demanded Joe, but he kept his voice cautiously lowered just the same. "Probably some harmless dubs——"

"Like ourselves," finished Jimmy, with a grin, "seeking shelter from the bitter weather."

"Well, whoever they are, they sure are mad about something," said Bob, hardly knowing why he should be so excited.

The voices inside that one-room shack had been raised in altercation, but now, as the boys listened, somebody evidently cautioned silence, for once more the tones were lowered almost to a whisper.

"There's something mysterious about this," said Bob, his eyes gleaming joyfully. "I vote we look into it."

"Right-o," agreed Joe, following the leader as Bob started softly toward the shack.

What they expected to find they had no idea. But it was an understood, though unspoken, rule with the radio boys never to pass by anything that looked in the least mysterious. And certainly this queer little shack in the woods bore all the air of mystery.

There was one small window near where they were standing and the four boys crowded up to this, jostling each other in the attempt to be the first to see through the dingy pane.

"Hey!" whispered Jimmy in anguish, as Joe's foot clamped firmly down upon his. "Quit parking on my toe, will you? There's lots of room on the ground."

Joe snickered derisively and that small sound came near to proving their undoing. For inside the cabin it happened that for a moment every one had stopped talking and in the silence Joe's laugh was distinctly audible.

"Some one's getting in on this," they heard one of the voices say, as though its owner were nervous, yet was trying his best to hide his uneasiness. "Let's take a look around, boys. You never can be too sure."

The radio boys looked at each other in consternation. There was no time to get away, even if they had wanted to. And now that they were convinced there was crooked work going on in the shack, they certainly did not want to leave.

Bob flattened himself against the wall and motioned to his chums to do likewise. If the fellows found them and wanted to put up a fight, "well, they'd get their money's worth, anyway."

But it so happened that the lads were not discovered. The door of the shack was on the opposite side from them, and either the men were too lazy to search carefully or they were too confident of the obscurity of their meeting place. At any rate, they went to the door, looked around, and, finding no one within sight, evidently decided that they had been mistaken in thinking they had heard a suspicious noise and reentered the shack without searching further.

"You're crazy, Mohun," the boys heard one of them remark, in an irritable voice. "You're letting your imagination—and your nerves—run away with you."

"Well, this deal is enough to get on anybody's nerves," was the grumbled reply, evidently from the person addressed as Mohun. "If we don't put it across pretty quick I'm going to quit. I've told you too much delay would be fatal."

The boys glanced at each other, and the relief they had felt at not being discovered was closely followed by huge excitement as they became more and more certain that they were on the verge of making an important discovery.

They crowded closer to the window though,

mindful of how close they had come to discovery, they were careful to make not the slightest sound.

Bob, who was closest to the window, could, by exercising the greatest caution, peer into the shadows of the room. He put out his hand as a warning to Joe, who was crowding him closely.

"Don't push," he said, in the merest whisper. "I have a notion this is going to be good."

So had the other boys, but they were mad clean through at the fate that prevented their getting a glimpse into the tumbled-down shanty. However, they held back, knowing that if they were too eager they would spoil everything. Discovery then would mean that they would never hear the secret these men were about to disclose.

The old shack had evidently once been lived in, for it was fitted up with furniture of a crude sort. Along one side of the room ran two long bunks, one above the other, and on the walls were some old dilapidated-looking pictures, evidently cut out of magazines or news periodicals.

There was a three-legged, rickety table in the center of the room, and about this the conspirators—for such they were—were gathered. Two of the men had chairs, patently home-made, for seats, while the third, who sat facing Bob, had merely an empty wooden box turned on end.

It was this last fellow who was now speaking and who had been addressed by the name of

Mohun. He was short and of fair complexion, with protruding, horsey teeth that stuck out disagreeably over his lip.

Another of the trio was a giant of a fellow, tall, dark and heavy-browed, while the third, who sat with his back to Bob, was of slighter build, but nearly as tall.

Mohun seemed to be the leader of the party, for now he was leaning across the rickety table, talking earnestly and emphasizing his remarks with blows of his fist upon it.

"I tell you, Merriweather," he said, addressing the giant, "this is our time to act. You are merely pussy-footing when you ask delay. I am convinced that delay means suicide."

Jimmy, catching the last word, gasped involuntarily and Bob nudged him warningly.

"Keep still," he hissed. "This sure is going to be good!"

The two other men looked uncertain but the fellow called Mohun was pushing the point home.

"This is our chance," he cried vehemently. "Salper is out of the way for the present, but we never know when he may take the notion to go back to the old job. They say he is getting mighty restive already."

At the mention of Mr. Salper's name Bob fell back in his amazement and landed on Joe's foot,

whereupon the latter emitted a squeak of pain that he immediately stifled.

"Did you hear that?" demanded Bob in an excited whisper, without a thought for poor Joe's foot. "They're talking about Mr. Salper."

Eagerly he turned back to the window while Herb whispered in an awed tone:

"Maybe they're going to murder the old fellow."

"Say, keep still, can't you?" said Bob impatiently, as he strained his ears to catch the lowered tones of the three men.

Herb subsided, and the four of them waited with bated breath to find out what these three conspirators had to do with Gilbert Salper.

"Maybe you're right, Mohun," the tall man with the craggy brows answered reluctantly. "But I can't help thinking that to strike now is a poor move."

"In two or three weeks we'll have everything just as we want it," added the man who sat with his back to Bob. "We'll have a sure thing then, while now——"

The man called Mohun threw up his hands in a gesture of despair.

"Pussy-footing again!" he cried disgustedly. "What kind of gamblers are you, anyway, to wait until you have a sure thing before you test

your luck? Don't you know that the big deals down on the Street that have been successful have been put through because the fellows doing it had nerve?"

"Yes, but not many of the deals have been as big or as important as this," said the giant quietly.

"All the more reason to strike quickly," argued Mohun, with heat, adding in a lowered tone: "I tell you this absence of Salper from Wall Street is the chance of a lifetime. It's the thing we've been waiting for. With him on the Street we haven't a chance for our lives. With him away, we have everything in our own hands. Now it's up to you whether we make the most of our luck, or throw it in the rubbish heap."

"But Salper is up here for an indefinite length of time," argued the man with his back to Bob. "It is said he will stay at least a month, maybe two. And a week—two at the outside—is all we need to make sure of relieving him of some of his ill-gotten wealth."

The man laughed noisily at this poor attempt at humor, and Mohun glanced nervously about him.

"Better look out," he said, peevishly. "You never can tell who's listening. They say the trees have ears around this way."

"Your nerves are getting the best of you, I think," cried the big man. "Just because

you've got cold feet is no reason why we should take the chance of losing out on the biggest deal we've had the chance of handling for many a day. Get a good sleep, man, and you'll think the way we do, to-morrow."

For a moment it seemed as though Mohun were about to spring upon the big man and Bob held his breath, expecting a struggle. Mohun's face turned a brick red and his lips drew back from his protruding upper teeth as though in a snarl. His hands clenched, he took a step toward the bigger man who had half risen from his chair.

"Then I'll tell you one thing, you pussy-footers!" he cried furiously. "If this deal isn't pulled through by the end of a week and if by that time we haven't our hands on a good chunk of Salper's money, then I'm through. Do you hear that? I quit!"

CHAPTER XIX

ON GUARD

THE radio boys had heard enough. Silently they tiptoed from their vantage point, putting off the tremendous desire to exclaim about what they had heard until they had put a good distance between themselves and the shack.

Then they overflowed with wonder and excitement.

"Say, wait till we spring this news on Mr. Salper!" cried Herb. "The man will near go off his head."

"Gosh, you couldn't blame him," said Joe, in an awed tone. "I wouldn't like to have those three fellows after my hard-earned cash myself."

"Then he was right when he thought there was somebody after his money," said Bob, striding along so swiftly in his excitement that poor Jimmy had hard work to keep up with him. "We thought he was kind of crazy, but I guess he knew what he was talking about all the time."

"But I say, you got all the best of it, Bob," said Herb. "Why couldn't you let the rest of us

get a glimpse of some honest-to-goodness sharp-ers?"

"They weren't much to look at," said Bob, with a frown. "That man they called Mohun was one of the ugliest scoundrels I've ever seen."

"Was he any worse than Cassey?" asked Jimmy, curiously.

"If he was he must have been going some," added Herb, with conviction.

"I guess nobody could be much worse than Cassey," said Bob, frowning at the memory of the stuttering scoundrel's evil acts. "But he's just as bad. When he jumped at that big fellow with the bushy eyebrows I thought he was going to bite him. He has teeth that stick away out over his under lip."

"Must be a beauty," commented Herb.

"I say," said poor Jimmy, fairly running in his effort to keep up with the other boys, "you're not going toward the hotel, Bob. May I ask where you are going?"

"Why, Doughnuts, you shouldn't have to ask," broke in Joe, before Bob could respond. "Don't you know there is only one place where we could be going after hearing such rotten news as we've just heard?"

"We're going to the Salpers, of course," finished Herb, with a condescending air that irritated the plump and puffing Jimmy.

"Well, you needn't be so fresh about it," he grumbled, rubbing his empty stomach ruefully. "It's nearly dark——"

"And it's dinner time," added Joe, with a grin. "How well we know you, Doughnuts."

"Well," grumbled Jimmy, grinning reluctantly, "I don't see why the Salpers can't wait till we can get something to eat."

"It won't take us long," said Bob, who had been thinking hard as they tramped along. "We'll just stop in and tell them what we've heard and then go on. I don't suppose there is anything that we can do."

"I guess Mr. Salper will do all that's necessary when he finds his money threatened," said Joe significantly.

"I reckon he's had a hunch that something of this kind has been going on for a long time—in fact, he as much as told us so," said Bob. "But I guess these rascals were so clever he couldn't put his finger on them."

"I wonder what kind of deal they were talking about," mused Herb.

"It was a crooked one, anyway," said Bob, decidedly. "All you had to do was to look at them to know that."

The little shack in the woods was a long way from the Salper place, and so, in spite of their

hurry, the boys did not reach it until just on the edge of dark.

The entire family was gathered in the living room of the Salper cottage, even Mr. Salper himself, and the boys threw their bomb right into the midst of them.

Mr. Salper had seemed inclined, as he usually did, to draw apart by himself, but at the very beginning of the boys' story, he evinced an almost fierce interest.

He questioned them minutely while the girls and Mrs. Salper listened wonderingly.

"You said the name of one of the men was Mohun?" he asked, throwing away the cigar he had been smoking and bending earnestly toward Bob. "What did he look like?"

The disagreeable impression the man had made upon him was still so vivid that Bob had no trouble at all in giving a graphic description of the fellow.

Mr. Salper's face grew blacker and blacker as he listened and he pulled out another cigar, biting off the end of it viciously.

"That's the fellow I've been suspecting all along," he said, finally. "Slick fellow, that Mohun. Whenever a man gets too eager to do things for you I've learned to suspect him. Yet, closely as I've watched this man, I haven't

been able to get a thing on him. As far as we could find out, he was perfectly square. But, by Jove, this puts an entirely new face on things."

He paused for a moment, puffing hard on his cigar while the others all watched him anxiously. The ill humor which had been hanging over him for so long seemed magically to have vanished. Now that his suspicions had been so unexpectedly justified, bringing with them the need for action, the broker was a different man, entirely. His brow had cleared and there was an eager light in his keen eyes.

"You fellows have done me the greatest of possible services," he said, turning to the radio boys—he had forgotten up to that time to thank them for what they had done. "If you could know what it means to me to have this information——"

He broke off, running his hand excitedly through his hair, his eyes gazing unseeingly out of the window.

"I must act and act quickly," he muttered, after a minute. "There is surely no time to lose. You said this man Mohun was urging haste?" he added, turning to Bob.

The latter nodded. "Said he'd quit if they didn't get a move on, or words to that effect," he told his questioner, and Mr. Salper smiled a preoccupied smile in response.

"Then Mohun will get what he wants. He has a way of getting what he wants," he said, again with that air of speaking to himself. "I'm glad to know it's Mohun—very glad!"

Although Bob had given as good a description as was possible of the other two men who had been in the shack with Mohun, Mr. Salper did not recognize them.

"Probably a couple of dark horses," he said, and dismissed the subject. Evidently, to him, Mohun was the most important of the rascals and the one it was necessary to deal with at once.

After repeated thanks from Mr. Salper and outspoken gratitude on the part of Mrs. Salper and the girls, the boys managed to get away.

They hurried on toward the Mountain Rest Hotel, talking excitedly of what had happened.

"That was sure just dumb luck," remarked Joe as he sniffed of the cold brisk air and began to realize that he was very hungry. "Our happening on that little shack just as we did," he added in response to an enquiring look from Bob.

"You bet," agreed Herb. "That was the time our luck was running strong. It will do me good if those scoundrels get come up with, especially the one with the big teeth."

"Oh, stop talking and hurry up," begged Jimmy, who, in his eagerness to get back to the hotel and dinner, was actually leading the others.

"It seems ten miles to the house when your poor old system is crying aloud for grub."

They laughed at him but followed his example just the same, for they had been tramping many hours and their appetites were never of the uncertain variety.

But just before they reached the welcome lights of the cottage they realized to their surprise that it was snowing again. So fast were the flakes coming that by the time they reached the door of the hotel they were well powdered with them.

"Hooray!" shouted Herb. "We sure are getting our money's worth of snow this winter."

"You bet," agreed Bob, adding happily: "And this one looks like a 'lallapaloosa.'"

CHAPTER XX

BROKEN WIRES

TRUE to Bob's prediction, the snowstorm proved to be a fierce one even for this season of unusual snows, and when the boys awoke the next morning they found that the ground had taken on an extra covering and the branches of the trees were weighted down with the heavy fall.

"Say, fellows, look what's here!" cried Joe as he roused his mates, sleepy-eyed from their comfortable beds. "Old Jack Frost sure was busy last night."

"Guess he thinks it's Thanksgiving," Bob agreed as he hurried into his clothes, keeping one eye on the frosty landscape and fairly aching to make part of it. "Hurry up, fellows, let's go out and have a snow fight."

"You're on," agreed Joe, and then began the race to see who would get from their cottage to the hotel and to the breakfast table first.

They arrived there—at the breakfast table, that is—at one and the same time and ate as raven-

ously as though they had not broken their fast in a week. Mr. and Mrs. Layton watched them and smiled, wishing that they might once more eat with such lusty appetites.

Before the boys had finished breakfast, it had begun to snow again, making the landscape appear more than ever blizzardy and bleak. Eagerly the boys buttoned up heavy sweaters, prepared to fight the storm to a finish.

It seemed that they were not the only ones whom the storm had lured forth. There were a number of people gathered in front of the hotel and, since they seemed rather excited about something, three of the boys joined them to find out what the fuss was all about, Jimmy remaining behind for the time being to take a nail from his shoe.

"The telegraph wires are all down," said a man in response to Bob's question. "There's a man been raving around here like a crazy man, declaring he has to send a telegram. Nobody can seem to make him understand that since the wires are all down such a thing is impossible."

"He might telephone," Joe suggested, but the man who had been their informant took him up quickly.

"They're down too," he said. "We're as marooned here, as far as any communication with the outside world is concerned, as though we were

stranded on an island in the midst of the ocean. This storm has done considerable damage."

"I should say so," remarked Joe, as the gentleman turned to some one else and the boys started on a tour of the place to look over the prospect. "I'll call it some damage to knock down both telephone and telegraph wires at one fell swoop."

"That talk about our being just as badly off for communication with the outside world as though we were on an island isn't quite correct," observed Herb. "That fellow seemed to forget all about trains."

"I suppose he meant quick communication," said Bob. "We could send a message by wire in an hour or less, while it would take two or three times that time to send the same message by rail."

"That's so," agreed Herb, staring up at the wires which had fallen beneath their weight of snow. "I'd hate to *have* to get a message through for any reason just now. But look," he added, pointing to the hotel. "Our acrials are still up anyway."

"I wonder who the fellow was who was so anxious to telegraph," said Joe, after a few minutes. "He must think himself in bad luck."

Bob brought his gaze from the damaged wires and stared at the boys, and at Jimmy who just then came puffing up.

"Say, I bet that was Mr. Salper," Bob said.

"Don't you remember last night that he said he must get a message through to his broker first thing in the morning?"

"By Jove, the storm knocked it clear out of my head!" exclaimed Joe. "Say, I feel sorry for him, all right."

"Wish we could help him some way," said Herb anxiously. "It would never do to let that fellow Mohun and his pals get off with the filthy lucre just when we thought we'd double-crossed them so nicely."

"I guess that's where Mr. Salper would agree with you," said Jimmy, with a grin. "Especially since the filthy lucre belongs to him."

They walked on in silence for a few moments, chagrined at the thought that the storm had played so into the hands of Mr. Salper's enemies.

They had learned from Mr. Salper the night before that Mohun of the protruding teeth was not the kind of man to let a golden opportunity pass. He would rush the "deal" through while Salper was out of town, and, from the latter's impatience, they had gathered that the next few hours would, in all probability, be the crucial time.

"Burr-r-r!" cried Jimmy suddenly, wrapping his arms as far as they would go about his chubby body and shivering with the cold. "This weather sure does make a fellow wish for a fur overcoat.

The thermometer must have gone down twenty degrees over night."

"Hear who's talking!" scoffed Herb. "With all that fat on your bones, Doughnuts, you haven't a chance in the world of feeling cold."

"I suppose you know more than I do about it—not being me," retorted Jimmy, scathingly. "I'd just like you to feel the way I do; that's all."

"Well, it isn't what you might call unpleasantly hot," observed Bob. "I must say I'm not sweltering, myself."

"Guess it isn't much colder than this up at the North Pole," agreed Joe, as he turned his sweater collar up higher about his ears. "Might as well rig up as an Eskimo and be done with it."

"Reminds me of that Norwegian, Amundsen," said Bob. "He sure intends to discover the North Pole with all the fancy trimmings, this time."

"What do you mean?" asked Herb, with interest.

"Do you mean to say you haven't read about it?" demanded Jimmy, indulgently. "Why, he's the fellow who is going to have his ship all dressed up with wireless so that when he smashes his ship against the North Pole he can let everybody know about it."

"It's a great idea, I call it," said Joe, enthusiastically. "Up to this time, explorers

haven't had any way of communicating with the outside world, and so if they got in trouble they just had to get out of it the best way they could or die in the attempt."

"While now," Bob took him up eagerly, "his wireless messages will be picked up by hundreds of stations all over the world and in case of need ships and teams of huskies and even aeroplanes can be rushed to his rescue."

"Exploring de luxe," murmured Herb, with a comical look. "Pretty soon there won't be any such thing as adventure because there won't be any danger. We'll have radio to watch over us and keep us from all harm."

"It's all right for you to talk that way," said Jimmy. "But I bet if you were one of these explorer chaps you'd be mighty glad to have something watch over you and help you out of a tight fix."

"Yes, I guess those fellows need all the help they can get," agreed Bob, soberly. "It isn't any joke to be away out there with hundreds of miles of ice and water between them and civilization."

"They say even the sledges are to be equipped with radio," Joe broke in. "So that they can keep in touch with the ship all the time and through the medium of the powerful sending set aboard the boat the ship itself can be kept in constant touch with the outside world."

"There are planes too, equipped with radio," added Bob. "And they say each plane is outfitted with skids so that it can land safely on the ice."

"I should think there would be danger in that," remarked Jimmy, rubbing his hands vigorously to set the blood circulating again. "They say the ice is awfully rough and bumpy and spattered with small hills of ice. I should think a pilot would have a jolly time trying to make a landing under those conditions."

"They intend to cut out the ice about the ship so as to make landing possible," explained Bob. "And in the other places the skids help them to make a sure landing. Say, wouldn't I like to make one of that expedition!" he added, with enthusiasm.

"I wonder how long they expect this expedition to take," said Herb. The idea of exploring the arctic with radio as a companion was a fascinating one to him and at that moment he would have made one of Amundsen's hardy crew, if such a thing were possible, with the greatest joy.

"They expect it will take them five years, maybe six." It was Bob who answered the question. "Their idea is to travel as far as possible north before the ice gets thick. Then when the floes close in about them they will drift with the

ice over the pole—or, at least, that's what they hope to do."

"What gets me," said Jimmy plaintively, "is how they are going to know when they get to the pole anyway."

Herb made a pass at him which the fat boy nimbly avoided.

"Why, you poor fish," said the former witheringly, "you sure will be a full-sized nut if you ever live to grow up. I suppose if you got to the North Pole you'd expect to see a clothes pole with the clothes line wrapped around it, ready for use."

CHAPTER XXI

A SUDDEN INSPIRATION

UNCONSCIOUSLY their feet had carried the radio boys in the direction of the radio station and now they were surprised to find themselves confronted by the building itself.

"We've come some way," Herb began with a chuckle, but Bob cut him short excitedly.

"Look!" he cried. "Didn't I tell you that radio was the best ever? Just cast your eye on that aerial. You don't see that trailing on the ground, do you?"

For a moment the other radio boys failed to grasp the significance of his words. Then they let out a great shout of triumph. For what Bob had said was true. Where other means of communication with the outside world failed, radio stood firm.

The aerial was there, towering as serenely against the slaty sky as though there was no such thing as a snowstorm. The great marvel of radio! For no wires, other than the antenna, were

needed to carry its messages to the farthestmost parts of the world!

For a moment the boys were awed as the real significance of the modern miracle was borne home to them. It was magnificent, it was inspiring merely to have the privilege of living in such an age.

"Well, Mr. Salper doesn't need to worry," said Joe, at last. "There's always radio on the job if he wants to get a quick message through to New York."

"It's queer he didn't think of it," agreed Bob, adding, as the intense cold struck still more deeply into his bones: "Come on in, fellows. I'd like to see what the operator has to say to all this excitement."

"You bet," said Jimmy, adding fervently: "And it will give us a chance to thaw out."

When the boys reached the room which had become so familiar to them, they found that here too, the old régime had been interrupted. Several men were gathered in the far corner of the room, talking earnestly, and the long table where the operator could be seen daily bending earnestly over his beloved apparatus was vacant. The operator himself was nowhere to be seen.

Sensing something unusual, the boys came forward hesitantly. At sight of them one of the men detached himself from the group of his com-

panions and came quickly over to them. The boys did not know his name, but his face was familiar to them.

"A most unfortunate thing has happened," burst out this man nervously, without even an attempt at a preface. "The operator here has been taken very ill with a fever and we are at a loss to find any one who can take his place in this emergency."

The modesty of the radio boys was such that at that moment no thought of the possibility of their being able to take the experienced operator's place entered their heads. They were earnestly sorry for the misfortune which had overtaken their friend, and they told the man so. It seemed to them that the latter was rather disappointed about something, and he listened to their words of sympathy absently. After a moment he left them and rejoined his companions at the other end of the room.

"Say, that's tough luck," said Jimmy, his round face comically long. "I knew that fellow would get into trouble if he didn't take more exercise."

Bob fumbled with the familiar apparatus on the table, his face troubled.

"If he's out of his head with fever, he must be pretty sick," he muttered, as though talking to himself. "And that means that he won't be able to attend to radio for a good long time to come."

"And with telegraph and telephone wires all down, that's pretty much of a calamity," added Joe, his eyes meeting Bob's with a look of understanding.

"Say!" cried Herb, suddenly seeing what they were driving at, "that knocks out Mr. Salper's last chance of getting even with those crooks."

"Yes," said Bob, soberly, "I guess the game's up, as far as he's concerned."

"Let's go over to the hotel and inquire for the sick man," Joe suggested, adding hopefully, "maybe he isn't as sick as they make out."

The operator had a room at the hotel, and the boys had been there once or twice to talk over points on radio with him and so they knew exactly where to go.

However, if they had treasured any hope that Bert Thompson's sickness had been exaggerated, they were promptly undeceived. No one was allowed to speak to him, the nurse at the hotel told them, adding, in her briskly professional manner, that it would be no use to speak to him anyway, since he was delirious and recognized nobody.

But before they went, softened by their real concern, she said, quite kindly, that as soon as the patient was able to receive visitors at all she would let them know.

They thanked her and went out into the freez-

ing air again. The snow had stopped and the wind had died down completely but in the atmosphere was a deadly chill, a biting cold that seemed to penetrate to their very marrow.

"Suppose we go to the Salpers," Bob suggested. "Mrs. Salper and the girls may need help, for I imagine Mr. Salper isn't in a very pleasant mood."

"I wonder," said Joe, as with common consent they turned in the direction of the Salper home, "if Mr. Salper has heard yet that even the radio is out of business."

"Give it up," said Herb, while Jimmy added, with a grin: "I'd hate to be the one to break the news to him."

But, as it happened, that was just what they had to do. They saw Mr. Salper coming and tried to pretend that they did not, but he would have none of it.

He made for them directly, with a scowl on his face as fierce as if they had been the cause of all his trouble.

"This is a fine business, isn't it?" he asked, waving his hand in the direction of the snow-weighted wires. "No telegraph, no telephone—only the radio left. I'm on my way to the station to try to get the message through, though that operator is a stubborn young donkey and has before this refused to send messages for me."

Herb and Jimmy made frantic motions to Bob to keep quiet, for they saw that he was about to tell the news. And Bob did.

"I'm sorry, Mr. Salper," he said quietly. "But the operator at the wireless station has become suddenly very ill and there's no one there to operate the apparatus."

For a moment Mr. Salper simply glared while the news sank home. Then he gazed wildly about him as though to escape from his own worrisome thoughts. Then the fierce scowl returned to his face and he made an angry motion toward the boys.

"The operator sick!" he muttered. "And not a doctor up here!"

The boys started and looked at him queerly.

"Do you need a doctor?" asked Bob quickly, thinking immediately of Mrs. Salper and the girls. "Is some one sick?"

"Yes," snapped Mr. Salper. "My wife is sick, very sick. And if I can't get any sort of word through, even by radio——" He paused and his mouth looked as though he were grinding his teeth.

He turned back toward his house, and the boys accompanied him with some vague idea of at least offering their sympathy, even if they could not do anything to help.

They found Edna and Ruth nearly frantic with fright.

"Mother is dreadfully ill," said Edna, between sobs. "Her hands and face are burning up and she talks queerly. I'm afraid it's pneumonia, and if she doesn't get a doctor pretty quick she'll d-die!" And with a sob she fled into the room where the sick woman lay.

The boys felt awkward, and, since there was nothing they could do to help, deeply concerned over the trouble of these friends of theirs.

"There's some good in Mr. Salper, anyway," said Joe, as they tramped along. "He was so worried over Mrs. Salper that he didn't mention those Wall Street scoundrels."

"I reckon it's worrying him just the same," said Jimmy.

"If only there was something we could do——" began Bob, then stopped short, a great idea leaping to his eyes. "Say, fellows, what's the matter with our sending that message?"

CHAPTER XXII

PUTTING IT THROUGH

THE boys stared at him for a moment as though he had gone suddenly crazy. Then the light of adventure dawned in their eyes, and they grinned joyously.

"Say, old boy," said Joe in an awed voice, "that sure is some swell idea. But do you think we could swing it? We know a lot about receiving, but when it comes to sending——"

"We're a bunch of nuts," finished Jimmy, decidedly.

"Maybe," retorted Bob. "But at this time, even a bunch of nuts might be better than nothing."

"We've been studying the code," said Joe thoughtfully. "We might be able to handle it all right. It isn't the first time, if we're not experts. Of course we can do it."

"But not for old Salper," said Herb. "He's so impatient he'd make us forget in five minutes everything we ever knew."

"Maybe," said Bob again, adding, stoutly: "But I'm game to make a try at it anyway. There's no one else to do it, and Mr. Salper stands to lose his wife and a lot of money besides if some one doesn't help him out."

"Well, let's make him the proposition," suggested Joe, pausing and looking back at the Salper house. "I'm with Bob in this thing."

"So say we all of us," sang Herb cheerily, as they turned back.

"So long as Bob's the goat," finished Jimmy.

They found Mr. Salper in the living room of the bungalow, savagely smoking a cigar. He scarcely looked at the boys when the girls let them in, and Bob was forced to speak his name before he gave them his attention.

"Well, what is it?" he said gruffly, his tone adding plainly: "What are you doing here anyway? I wish you'd get out."

The tone made Bob mad, as it did the other boys, and when he spoke his own tone was not as pleasant as usual.

"We've decided to try to help you out, if we can, Mr. Salper," he said, and the man looked at him with a mixture of surprise and incredulity.

"In what way?" he asked, in the same curt tone.

"We know something about sending and receiving messages by radio," Bob went on, getting

madder and madder. "And we thought maybe we might get a message through for you to a doctor and to your brokers, as well. Of course," he added, modestly, "we haven't had very much experience——"

Bob was too modest to say anything about how he had once sent messages to some ships at sea, (as related in detail in "The Radio Boys at Ocean Point,") and how he had tried to send on other occasions.

"Experience be hanged!" cried Mr. Salper, so suddenly that the boys jumped. "You mean to tell me you can operate that radio contraption?"

"I think so," said Bob, still modestly. "We haven't done much along that end of it——"

"You'll do," cried Mr. Salper, while Edna and Ruth stared at him with tear-reddened eyes. "Are you ready to go with me right away to the station?"

The boys nodded and the older man shrugged into his great coat, reaching quickly for his cap.

"Take care of your mother," he said to the girls. "I'll stop on my way over to the hotel and send a nurse over for her. I hear there are two of them there. Don't see why the physician there didn't send some one to take his place if he had to leave."

In a moment the radio boys found themselves

once more in the freezing air of the out-of-doors, being hurried along by the erratic Mr. Salper.

Poor Jimmy suffered on that forced march. Although he uttered no word of protest, his face was purple and his breath came in little puffing gasps before they had reached the hotel.

Once there, they had a little respite, however, while Mr. Salper went to arrange about having a nurse sent over to his wife. Jimmy waited in the hotel lobby in a state nearing collapse while the other boys went up to inquire once more about their friend, the operator.

They found him no better—worse, if anything—and their faces were very solemn when they rejoined Jimmy in the lobby.

“Guess it will be nip and tuck if he gets through at all,” said Bob, anxiously. “I don’t see why such hard luck had to pick him out for the victim.”

“I suppose they’ll appoint another operator right away,” suggested Herb.

“I suppose so,” agreed Jimmy. “But it will be hard to get any one for a week or more on account of the heavy weather.”

“And in a week’s time without communication with the outside world a lot of Mr. Salper’s money will probably have gone up in smoke,” said Joe.

"Yes, it's us on the job all right," said Bob, looking a bit worried. "I only hope we can live up to what's expected of us."

"All right, boys," said Mr. Salper, on returning, in his eyes the preoccupied look of the man of affairs. "If you can help me out of this fix, I will surely be deeply in your debt."

These genial words—almost the first that they had heard from the self-absorbed man—warmed the boys' hearts and they resolved to do the best they could for him, and, through him, for his daughters.

When they reached the station they found it deserted save for one man who sat at a desk, humped over in a dispirited fashion, reading a magazine.

At the entrance of Mr. Salper and the boys he looked up, then got up and came over to them as though he were glad of their companionship.

"How do you do, Mr. Salper?" he said, addressing the older man with marked respect. "Is there anything I can do for you?"

"Nothing, unless you can work this contrivance," returned Mr. Salper, with a comprehensive wave of his hand toward the cluttered radio table.

"I'm sorry," said the other, a frown of anxiety lining his forehead. "The operator is sick, and

because of the heavy weather it is doubtful if we shall be able to secure another one within the week."

"A week!" cried Mr. Salper. "That amount of time, my friend, may very easily spell ruin for me. It is necessary that I communicate with New York immediately. Are you ready, boys?"

The man looked with surprise, first at the radio boys and then back to Mr. Salper.

"Am I to understand——" he began, when Mr. Salper cut him short with an imperative wave of the hand.

"These boys," he said, "know something of radio. How much they know I am about to find out.

"Are you ready?" he asked, sharply, as the boys still hesitated. "A delay of even a few minutes would be regrettable."

The boys looked at each other, and since no one else made a move to approach the apparatus, Bob saw that it was up to him. And right there he realized the great difference that there is between theory and practice. Of course they had had some practice in sending and they were fairly familiar with the code, but never before had they been called upon to make use of their knowledge in such a matter as this.

Then too, Mr. Salper was not the kind of person to inspire self-confidence. He was a driver,

and it is hard to do good thinking when one is being driven.

However, having gone so far, there was no possibility of backing out and with a show of confidence, Bob approached the apparatus. The man who had addressed Mr. Sälper regarded him with not a little distrust. He had heard of the radio boys, as who at Mountain Pass had not, but he certainly did not think them competent to send a message of any importance.

And at that moment, neither did Bob.

"Will you send your message phone or code?" he asked, looking up at Mr. Salper inquiringly. "We can do either here."

Mr. Salper hesitated for a moment, then with a significant glance at the other man, who was hovering curiously near, he snapped out, "Code."

"Do you know the letters of the station to be called?" asked Bob.

The broker consulted a notebook which he took from his pocket.

"Call HRSA," he returned. "That is our Stock Exchange station," he explained. "They ought to be on the job while the Exchange is open. They will relay a message to my brokers."

Joe was standing beside Bob and saw that his chum's hand trembled somewhat as he took hold of the ticker.

"Don't get rattled, Bob," he whispered. "Take your time and don't let him scare you. Remember, it's you that's doing the favor."

Bob grinned, and then began sending out the call. Across the ether traveled the letters HRSA and the call was presently caught up in New York and then another message was relayed to the office of a well-known brokerage firm.

"Hey, Bill," called a well-dressed young man seated at a desk in the far end of the office. "Here's WBZA calling us. These are the letters of the station at Mountain Pass——"

"Where the Honorable Mr. Gilbert Salper is taking his rest cure," finished another man, flinging away his cigarette and coming to stand beside his partner. "Do you suppose it's the old boy himself calling?"

"We'll soon find out," returned the other, and without delay sent in a message to the New York sending station. In a few seconds they were being radioed into the ether.

Bob's face beamed as he transcribed the dots and dashes into words. The message read thus:

"WBZA heard from. HRSA awaiting message."

Mr. Salper, who had been striding up and

down, hurried to Bob's side in answer to the lad's hail. The other boys were peering eagerly over Bob's shoulder.

"I've reached HRSA and through them H. & D.," explained the young operator proudly. "H. & D. are waiting for your message."

"Fine! Fine!" cried Mr. Salper, and his face showed great enthusiasm. "Those are my brokers, Hanson and Debbs. Got 'em right off the reel, didn't you, boy? Great work! Can you get my message through at once?"

"I don't know of anything to stop me," answered Bob. It seemed too good to be true that he had picked up the right station so quickly.

"Send this, then," Mr. Salper directed. And in a firm hand he wrote down the following message:

"Mohun is a crook and plots to ruin me. Find out his scheme and check him.

"GILBERT SALPER."

CHAPTER XXIII

THE MIDNIGHT CALL

SKILLFULLY Bob tapped out the message and in an inconceivably small space of time it had been received by the station HRSA and relayed to H. & D. The boys would have been interested if they could have known the sensation caused by the few words.

"Oh, boy!" cried Hanson, of the firm of Hanson and Debbs. "I've suspected this slick fellow Mohun for a long time. Now with Salper's authority we can go in and clean him out."

"Salper wouldn't make an accusation of that sort," said Debbs thoughtfully, "if there wasn't something in it. He's had some sort of inside tip all right."

"Well," returned the other briskly, "we'll let the old man know we're on the job, and then get busy."

Accordingly, a few minutes later Bob received and transcribed this message:

"Right. We'll have him inside of twenty-four hours."

At the confidence contained in the message Mr. Salper straightened his shoulders as if a great load had been lifted from them and held out a friendly hand to Bob.

"I can't tell you what you have done for me," he said, cordially. "Of course I'm not safe yet from the crooked work of these men, but at least Hanson and Debbs have been warned to look out. And that's two-thirds of the battle."

"I'm mighty glad we've been able to help," said Bob, adding earnestly: "If there's anything else we can do please call on us. Mrs. Salper——"

He paused, for at mention of his wife's name the relief disappeared from Mr. Salper's face and in its place was the old worried frown.

"Yes—my wife," he muttered, and, without another word to the boys, turned and stalked out of the room. The man, who had all this time lingered near them, turned and went out after Mr. Salper and the boys were left alone.

"Say, you sure did turn the trick that time," said Herb admiringly. "If they succeed in getting those crooks, Mr. Salper will love you all the rest of his life."

"It was more luck than anything else," Bob re-

peated. "Imagine getting that station first throw out of the box."

"Never mind," said Joe, adding truthfully: "No one else about this place would have been able to do as much."

They lingered for a while, talking over the exciting events of the day and tinkering with the complicated apparatus.

"Did you hear the latest prediction of Marconi?" asked Joe. "He says that he has positive proof that in the near future a radio set will be perfected which will send messages entirely around the world."

"Yes," said Bob eagerly. "He even declares that we'll be able to put a sending and receiving set side by side on the same table and receive the messages that a moment before we've sent out."

"It only takes a second of time too," said Herb. "Imagine sending messages completely around the world at such speed. If Marconi didn't say it could be done, I sure wouldn't believe it."

"We'll be talking with Venus or Mars pretty soon," said Bob. "Marconi says he has already received messages that don't come from anywhere on the earth."

Although they said little about it, the boys were elated at Bob's success with the code, and

it was surely a pleasant thought that they had helped Mr. Salper, if only that they might make Mrs. Salper and the girls happy. They had even, despite his usual gruffness, begun to feel a sort of liking for Mr. Salper himself.

During the long snow-bound afternoon they thought often of Mrs. Salper and wondered if she were better. They wanted to inquire, but they were afraid of making themselves a nuisance.

Toward evening they strolled over to the hotel to ask after the operator and found to their delight that he was better. The nurse, who had become very friendly toward them, said she thought the trouble had been checked in time and that the sick man's recovery, though it might be slow, was sure.

With hearts lightened on that score they went home. After dinner at the hotel they spent some time tinkering with their set. One time they noticed that in a vacuum tube was a pale blue glow, and Joe was at a loss to know how to account for it.

"We've got too high a voltage on the B battery," said Bob, after a moment of study.

"But how would that effect it?" asked Herb, interested.

"Why," answered Bob, thoughtfully, "the high voltage causes a sort of electrical breakdown of

the gas in the tube and it's apt to affect the receiving."

"Say, Bob's getting to be a regular blue stocking," commented Jimmy admiringly. "We'll have to get a move on to catch up with him."

"You bet *you* will," said Herb, with insulting emphasis on the pronoun. However, Jimmy was too interested to notice.

"Let's reduce the voltage, Bob," Joe was saying eagerly. "We'll test out the theory."

"It isn't a theory," replied Bob, as he reduced the voltage and the blue glow disappeared as though by magic. "You can see for yourself that it's a fact."

This discussion led to others, and they sat for some time eagerly experimenting with their set. It was just as well that they did for they had just gone over to their cottage and thus were able to answer quickly the imperative summons that came to them a few minutes later.

In response to a knock on the door they found Mr. Salper standing outside in the bitter night air looking so white and shaken that they were startled.

He came just inside the door and spoke in quick, jerky sentences like a man talking in his sleep.

"My wife is dangerously ill," he said. "She seems so much worse to-night that there is im-

perative need of a doctor. There is no doctor up here, and in this weather it would take too long to summon one. The trained nurse who is with her suggests that we try to get in touch with a doctor by radio and ask his advice. The idea is far-fetched, but it seems about our only hope. If that fails——” he paused and Joe broke in eagerly.

“My father’s a doctor, Mr. Salper,” he said, and there was pride in his voice.

“A doctor, eh?” returned the broker quickly. “Oh, if only he were here!”

“I don’t see how you are going to get hold of your father,” broke in Herb. “He’s in Clintonia. Even if he got our message, through Doctor Dale or somebody else with a receiving set, he couldn’t send any message here.”

“But he isn’t in Clintonia!” shouted Joe, eagerly. “He went to Newark, New Jersey, to attend some sort of medical convention and see if he couldn’t find out more about the epidemic that hit Clintonia.”

“Newark!” came simultaneously from Joe’s chums.

“Why, the big radio sending station is there!” exclaimed Bob.

“Why can’t you send a message to that station and ask them to get hold of your father?” broke in Jimmy.

"Maybe I could do it," announced Joe. And then he looked at Bob. "Perhaps you had better do the sending. You'll probably have to call them in code."

Bob was willing, but first he went up to tell his mother and father where he and his chums were going and beg them not to worry if they did not come back soon.

On the way to the radio station they stopped at the Salper bungalow, where the calm-faced nurse was waiting for them. She had left the Salper girls in charge of their mother, giving them minute instructions as to what to do, and was going with Mr. Salper in the hope that they might possibly secure medical advice by radio.

The station was finally reached. It looked deserted and gloomy at that hour of the night, and as Bob sent a call for help vibrating through the ether he felt a creepy sensation, as though he were, in some way, dealing with ghosts.

There was just the slightest chance in the world that they would reach Doctor Atwood. Just a chance, but if they did not take that chance Mrs. Salper would die.

For a long time they tried while the nurse sat quietly in the shadows and Mr. Salper strode up and down, up and down, his face drawn and white, his usually elastic step heavy and dragging.

Again and again went out the call for the

Newark station. Minute after minute passed, and still Mr. Salper walked up and down uneasily.

"I guess you'll have to give it up——" Herb was beginning when suddenly Bob motioned for silence. The radio was speaking, and he was taking down the message as well as he was able.

"I've got Newark!" the young operator cried excitedly. "Now I'll put in a call for your father, Joe. Where is he staying?"

"At the Robert Treat Hotel."

Once more Bob went to work rather excitedly and even a little clumsily, yet his message went through. In reply he received another, stating that Dr. Atwood had been called by telephone and would be at the sending station inside of fifteen minutes.

"And the best of it is, he is to radiophone," added Bob to Joe. "So you can talk to him direct."

After that the minutes passed slowly, both for Mr. Salper and the boys. They thought the end of the wait would never come. But at last the words so eagerly awaited reached them.

There was no mistaking it, even though static interfered and the tuning was not good—Dr. Atwood's voice, cheery, reassuring, helpful. In his joy at the sound of it, Joe shouted aloud.

"Hello, WBZA," came the voice. "If this is Joe talking, give me the high sign, my boy."

During the message Bob had tuned in the right frequency and, with static eliminated one might have thought the speaker was in the same room.

Then there followed a battle with death that the boys would remember as long as they lived. As soon as Doctor Atwood was made to understand the nature of the service asked of him, he became immediately his brisk, professional self.

The nurse, instantly alert herself, gave him a description of the case and it was wonderful as soon as the connection was switched off to hear his kindly voice responding, giving full directions for the care of the patient. He declared that he would be on call all during the night and requested that some one call him every hour—oftener, if it became necessary—to report the progress of the patient.

The nurse hurried off, accompanied by Mr. Salper, and for the rest of the night the boys kept busy, marking a trail between the Salper cottage and the radio station, taking reports from the nurse and carrying directions from Doctor Atwood.

It seemed strange and weird, yet wonderful and soul-stirring, this tending of a patient by a doctor many miles away. Once, during the night, hope almost failed. Mrs. Salper scarcely breathed and lay so still that Edna and Ruth were sure the end had come. They clung to each other sob-

bing, while Mr. Salper strode up and down, up and down the room as though if he stopped he would die too.

Then came another message from Doctor Atwood. The nurse followed his directions and once more hope came back to the Salper home. The patient rallied, stirred, and for that time at least, the danger was past.

So dawn came at last and Joe and the two younger boys went back to their cottage to try to catch a few hours of sleep. Bob remained at the station, declaring that he felt not at all tired and as soon as the other boys had rested they could come to his relief.

A hard vigil that for Bob. In spite of all he could do, his head would nod and his heavy eyelids close, to be jerked open next moment by the arrival of some one from the Salper home or a message from Doctor Atwood.

News of the struggle had spread all over Mountain Pass, and people watched with admiration and interest the brave fight that was being made for a woman's life. And sometimes it seemed that, despite all their efforts, the struggle must end in failure.

All that day the battle waged and the next night—the boys taking turns at the radio board, untiring in their determination not to lose. And Doctor Atwood was as determined as they.

And then, on the morning of the second day came news that the patient had passed the much-dreaded crisis and, with the most careful nursing, was sure to recover.

"She'll be all right now," came Doctor Atwood's cheery voice. "It's been a hard pull, but she's past the danger point now. Keep in touch with me, boys, so that, in case of a relapse, I can tell you what to do."

Joe turned to the boys with the light of pride and affection in his eyes.

"That's some dad I've got!" he said.

Later, when the boys walked over to the Salper home to offer congratulations, the girls received them with literally open arms.

"You've saved mother's life!" cried Ruth, with a catch in her voice.

"And we love you for it!" added Edna gratefully. "You just wait till mother knows!"

CHAPTER XXIV

A PLOT THAT WENT WRONG

"SO FAR, so good," breathed Bob happily, as the boys were discussing the news that Mrs. Salper had passed the crisis and was now probably on the road to recovery. "That's one thing we can set down to the credit of radio."

"And it's not the only thing of the same sort," put in Joe. "Do you remember what Mr. Brandon told us of that ship with thirty men and no doctor on board, where twenty-four of the men were down with a mysterious disease? The captain got a message by wireless to shore telling of his plight, and one of the best doctors in New York City went to the radio station there and got in touch with the captain. He talked to him by radio for hours, had him describe just the symptoms, and then told the captain just what to do. A couple of days later the captain wirelessly in that he had followed directions and that all of the men had recovered and were fit for duty."

"Yes," said Herb, "and about that other case,

too, where a man had an infected hand and they were afraid he was going to have lockjaw. A doctor on land told the captain how to treat it and the man got along all right."

"Trust radio, and you won't go wrong," summed up Bob. "On land and sea it's right on the job."

"I only hope it will be as effective in saving Mr. Salper's money," observed Joe.

"I think very likely it will," replied Bob. "He's about as keen as they make them, and now that he knows what those rascals are plotting against him it's dollars to doughnuts that he'll get the best of them. Their only chance was in taking him by surprise and putting over that deal while his back was turned. And now that he's got in touch with his brokers I guess the game is up."

"I wonder how long it will be before we know how it turned out," conjectured Herb.

"Oh, probably not more than two or three days," replied Bob. "Things move pretty fast in Wall Street when a fight is on for control."

"I hope he comes out on top," observed Joe. "He's a good deal of a crab, and I was mighty sore at him when he landed on us the way he did the day we were coming up here. Acted as though he thought we ought to be shot at sunrise. But since that time I've seen a good deal about

him to like and I've come to the conclusion that he's a regular fellow after all."

"You can tell by the fondness that the girls have for him that he can't be so bad," said Bob. "That's a pretty good sign to go by. They know him better than any one else except his wife, and she seems to think, too, that the sun rises and sets in him."

"I want him to come out ahead not only for his own sake but because I want to see that fellow Mohun downed," put in Jimmy. "I'm sore at him right down to the ground. I don't like his eyes, I don't like his voice, I don't like his teeth, I don't like his character——"

"Outside of that, though, I suppose he's all right," suggested Joe, grinning. "He seems to be just about as popular with you as a rattlesnake."

"That's what he reminds me of, anyway," admitted Jimmy.

"Talking of rattlesnakes," put in Herb, "here come three of them now," and he indicated Buck Looker, who, with Lutz and Mooney, was coming along the road. For some time now the Looker crowd had kept out of the radio boys' way.

"I wonder what trick they're up to now," said Bob, as he saw that the bunch had their heads together in earnest conversation.

"No knowing," answered Joe; "but it's a safe bet that it's something cheap and low down. Buck would think the day was wasted if he didn't have something of the kind on hand."

The groups passed each other without speaking, though Buck darted a look at Bob in passing that had in it the usual malignance, mingled with a touch of triumph.

"Did you see that look?" queried Herb, with interest. "Seemed as if he had something up his sleeve."

"I know what it meant well enough," answered Bob, with a shade of soberness. "My dad was telling me that he'd been notified that a suit had been started against him and the fathers of you other fellows by Mr. Looker to recover the value of the cottage that he said we set on fire."

"That's all bunk!" cried Herb indignantly. "He couldn't prove it in a hundred years. A lawsuit, eh? Huh!"

"Dad doesn't think Looker has much of a case," replied Bob. "Still, he says that you can never tell what a man like Looker and the kind of lawyer he would hire may do. Of course we can't get away from the fact that we were in the house the day before it burned, and that looks bad. We know we didn't set it on fire, but nobody else knows we didn't. At any rate, even if Looker loses his case, our folks will have to hire

lawyers and lose a lot of time in attending court, so that all in all it makes a pretty bad mess."

"So that's what Buck was looking so tickled about!" exclaimed Joe. "I'd like to wipe that look off his face."

"It might be a little satisfaction," laughed Bob. "But it wouldn't help us win the lawsuit."

By this time their walk had taken them near the vicinity of the radio station; and as they approached it they caught sight of Mr. Salper pacing back and forth in a state of impatience.

"Seems to be stirred up about something," remarked Joe.

"Did you ever see him when he wasn't?" laughed Jimmy.

At this moment Mr. Salper caught sight of the boys and came hastily toward them.

"I want some messages sent and taken," he said, in his usual abrupt way, though there was none of the sharpness in his voice that had usually been in evidence when he spoke to them. "I wonder if you could do this for me," and his eyes rested inquiringly upon Bob.

"I'll do my best, Mr. Salper," replied the latter, and the whole group went into the wireless room.

"I suppose you have permission to use this plant?" came from Joe.

"Oh, yes. If it hadn't been for that I couldn't

have used it as I did those other times," answered the broker.

Bob seated himself at the sending key and, following the financier's directions, got in touch with the Wall Street house that had figured in the previous communications.

For an hour or more there was an interchange of messages that were mostly nonunderstandable to Bob and his friends who listened with the keenest interest. There was talk of stocks and bonds and of consolidations and controls and proxies and a host of other things that bore on financial deals.

At the beginning, Mr. Salper sat with furrowed brows and an air of intense concentration. But as the answers came in to his various inquiries, his brow gradually cleared and he relaxed somewhat in his chair.

Finally there came an answer that stirred him mightily. He jumped to his feet and slapped his thigh.

"I've got him!" he cried jubilantly. "By Jove, I've got him!"

CHAPTER XXV

SOLVING THE MYSTERY

JUST whom Mr. Salper had got the radio boys could not tell with certainty, but they had a shrewd suspicion that Mohun was the hapless individual.

The financier walked happily and springily about the office, chuckling to himself, and Jimmy declared afterward that if they had not been there he would have danced a jig.

At last, when he had given sufficient vent to his elation, Mr. Salper turned to Bob.

"I'm sure I can't tell you how I thank you," he declared, with a cordiality and heartiness that they had never yet seen in him. "This matter was one of the most important that has come to me in the whole course of my life. Hundreds of thousands of dollars were involved in it, and I'd surely have lost out if I hadn't had your services in this extremity. And now I'm going to prove my gratitude. A check—"

"No, thank you, Mr. Salper," interrupted Bob

hastily. "We don't want money for the service we've been to you. It's been exciting and interesting work for us, and I, at least, have been more than paid in the experience I've got through sending."

"Well then I'm going to get you the finest radio set that money can buy," persisted Mr. Salper.

"Not even that, thank you," returned Bob, smiling. "It's awfully good of you, and we appreciate it, but we've learned more of radio by building our own sets than we possibly could have done in any other way. If you want to send a check to the Red Cross or some other society of the kind, it would suit us better than anything else."

"You're a stubborn young rascal," said Mr. Salper, with a smile, "and I suppose I'll have to let you have your way. But just bear in mind that you boys have a friend in me for life, and if I can ever be of service to any of you in business or anything else, let me know and I'll be only too glad to do it."

He bade them good-by and went off briskly toward his bungalow to tell his family of the news that had lifted such a heavy burden from his brain and heart.

The third day after the episode at the radio station the radio boys had gone further afield

than usual and came upon a little shack that had evidently been used by workmen as a place for storing their tools. It was little more than a shed, and the boys, bestowing on it only a casual glance, had come nearly abreast of it when Bob, who was slightly in advance, heard a voice that he recognized as that of Buck Looker.

He stopped dead in his tracks, and his companions did the same as he held up his hand in warning.

"We certainly did put it over on those boobs all right," Buck was saying, and the remark was followed by laughs of satisfaction.

"Yes, but we're not yet out of the woods," came the voice of Carl Lutz, with a touch of uneasiness in the tone. "Suppose when they put us on the stand to testify that we found Bob Layton and the other fellows in the cottage the evening before it burned, their lawyer asks us if we were in it too?"

"Well, let them ask," replied Buck. "All we'll have to do is to deny it. We know they were in it. They don't know we were in it. Who knows that we slipped in later and sat there until nearly midnight smoking cigarettes?"

With a bound Bob was at the door of the shack.

"I know it!" he cried. "I didn't know it till

just this minute, but now I know it by **your** own confession."

"We all heard it," echoed Joe, as he, with Herb and Jimmy, followed Bob into the shack.

Consternation and conscious guilt was written on every one of the three faces.

Buck was the first of the cronies to recover some measure of self-possession.

"Think you've put something over, don't you?" he sneered. "Well, you've got another think coming to you. This won't do you a bit of good in court. I'll simply swear that I didn't say anything of the kind and that you've made up the story out of whole cloth. It'll be simply my word against yours, and you'd be interested witnesses trying to help your fathers out by cooking up this story. So what are you going to do about it?"

"I'll show you what we're going to do about it!" cried Joe, starting forward.

But Bob stopped him.

"Wait a minute, Joe," he said. Then he turned to Buck. "Do you mean to say," he demanded, "that you'd take a solemn oath in court to tell the truth, and then go on the stand and swear to a downright lie?"

The contempt in his tone stung Buck into fury.

"You can put it any way you like," he shouted. "I'm simply not going to let you get the best of

me. Who cares for the old confession as you call it? You can have as many of those as you like and it won't do you any good. Here's another one now for good measure. We were in the house late that night. We were smoking cigarettes. Probably that's what caused the fire to break out later. I tell you these things just because it won't do you any good. In court I'll deny that I ever said them. You'll say I did. But the court will know that you have as much interest in lying as I have, and it'll just be a stand-off. You'd have to have a disinterested witness, and that you haven't got."

"Oh, yes, they have," came a voice from the doorway, and Mr. Salper stepped into the shack.

An exclamation of delight broke from the lips of the radio boys, while Buck and his cronies slunk back in terror and confusion.

"I was out taking a stroll," explained Mr. Salper, "and as I heard loud voices coming from the shack I stepped up to see what was the matter. I was just in time to hear the full confession of this estimable young man"—here he turned a withering glance on Buck—"and while I'm here, I guess I'll take it down."

He drew from his pocket a notebook and a fountain pen and wrote rapidly, while Buck and his companions looked at each other like so many trapped animals.

In a few minutes Mr. Salper had finished. Then he read in a clear voice just what he had written. It was a complete confession similar to that which Buck had made, with date and place affixed. He handed this over to Buck with the fountain pen, with a crisp demand that he sign it.

Buck hesitated as long as he dared, but with those keen eyes used to command fixed upon him from beneath Mr. Salper's beetling brows, he finally signed his name, and Lutz and Mooney shamefacedly followed suit.

"I guess that will settle the law case," Mr. Salper remarked, with a smile, as he handed the precious document to Bob, who folded it carefully and put it in his breast pocket. "Now perhaps we would better go and leave these worthy young gentlemen to their meditations. I don't think they'll be especially pleasant ones."

The radio boys left the shack, followed by the black looks of the discomfited conspirators.

"You certainly came along in the nick of time, Mr. Salper," said Bob. "We're very grateful to you."

"I'm glad if I've been able to be of service to you," replied Mr. Salper. "It's only paying back in small measure what you've done for me. The bulk of the obligation is still on my side."

It was a happy group of radio boys that re-

turned to the Mountain Rest Hotel that afternoon.

"Adventures have surely crowded in on us lately," remarked Bob.

"More than they ever will again," prophesied Joe.

But that he had not foretold the future correctly will be seen by those who read the following volume of this series, entitled: "The Radio Boys Trailing a Voice; Or, Solving a Wireless Mystery."

That very night they sent the news of the confession to Dr. Atwood with the request that he would communicate the tidings to the fathers of the rest of the boys. The lawsuit, of course, was dropped at once, and Buck and his cronies slunk home in disgrace.

"Radio is lots of work, but it's also lots of fun," remarked Joe that night, as they sat late reviewing the events of the day.

"Radio," repeated Bob. "It's more than fun. It's excitement. It's romance. It's adventure. It's life!"

THE END

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